LIVE TRAINING CAMPAIGN PLAN

COLs Reedy and Flanagan
6 December 2012 Update

Visit the Live Training
Community Portal at:
LT2Portal.org

PM TRADE
PROJECT MANAGER TRAINING DEVICES

PM TRADE - I/ITSEC 2012 Schedule of Events

MONDAY, 3 DECEMBER
PM TRADE Grey Beard Session -
COL Flanagan, *Invitation Only*
- 1200 - 1400
- W203A

TUESDAY, 4 DECEMBER
Victory Architecture and
Specification Briefing -
Pat Sincebaugh
- 1000 - 1200
- W207C

ATESS Industry Day - Kyle Platt
- 1200 - 1315, Brown Bag Lunch
- W203A

PM TRADE TSIS Update -
COL Flanagan
- 1300 - 1345
- PM TRADE Booth 171

Meeting with MAST Customers -
Michael Plumtree, *Invitation Only*
- 1300 - 1400
- W204B

WEDNESDAY, 5 DECEMBER
Target Modernization -
James Todd
- 0900 - 1100
- W203A

Integration of Live Training
Standards - Mark Dasher
- 1130 - 1300, Brown Bag Lunch
- W203A

Meeting with Aviation FMS
Customers - Edward Grekoski,
Invitation Only
- 1300 - 1400
- W204B

THURSDAY, 6 DECEMBER
Product Support Publication
Requirements - Robin Alexander
- 1000 - 1100
- W204B

Live Training Campaign Plan Brief -
COL Flanagan
- 1300 - 1500
- W300

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Community Portal at:
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PM TRADE - Contact Information

Presenters

COL Mike Flanagan
PM TRADE

LTC Chuck Worshim
PM CTIS

LTC Craig Ravenell
PM DT

LTC Scott Tufts
PM LTS

LTC Keith Smith

APM FMS

Mr. Jim Grosse

TRADE Architect

Mr. Brian Kemper
Chief Engineer, PM TRADE

Mr. Rob Wolf
Strategic Requirements Integrator,
PM TRADE

Mr. Jim Brewer
Chief, Requirements
& Integration Office

"The Army is facing a new era of warfare, and that requires a new approach to training."

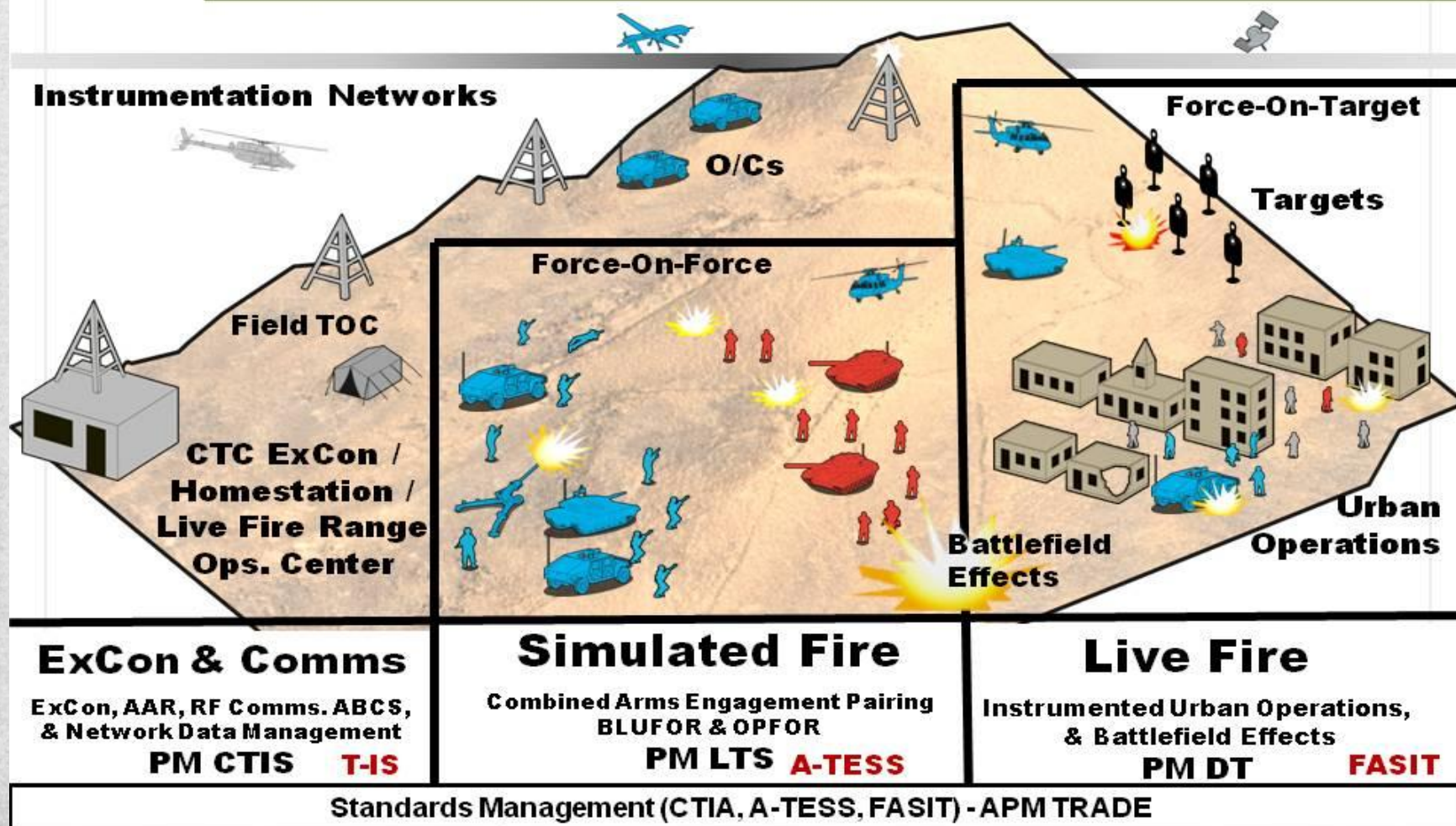*Gen. Robert Cone, CG, TRADOC, Army Times, 2 October 2011*

"We must be prepared to operate across the full spectrum of conflict, whether it's offense, defense, stability or civil support operations. Regardless of the mission, we at PEO STRI pledge to provide timely, realistic, readily available, cost efficient and safe training to U.S. and its allied nations' Warfighters."

Dr. James T. Blake, Program Executive Officer, PEO STRI

Live Training Lines of Operation

STRI

Instrumentation Networks

O/Cs

Force-On-Target

Targets

Field TOC

Force-On-Force

**CTC ExCon /
Homestation /
Live Fire Range
Ops. Center**

**Battlefield
Effects**

**Urban
Operations**

ExCon & Comms	Simulated Fire	Live Fire
ExCon, AAR, RF Comms. ABCS, & Network Data Management	Combined Arms Engagement Pairing BLUFOR & OPFOR	Instrumented Urban Operations, & Battlefield Effects
PM CTIS T-IS	PM LTS A-TESS	PM DT FASIT

Standards Management (CTIA, A-TESS, FASIT) - APM TRADE

Significant Guidance from OSD/HQDA

1. AAE: Guidance to PEOs on Common Operating Environment (Dec 11)

2. AAE: Process Management & Performance Improvement (Jan 12)

3. "Changing the Acquisition Paradigm" LTG Phillips, AL&T Magazine (Jan 12)

4. AAE: Tech Data Rights Strategy, Tech Dev Strategy/Acq Strategy (11 Jun 12)

5. CAC-T: FY13 Warfighter Outcomes for Training & Education (16 Jul 12)

6. TRADOC Policy Letter 21, Acquisition of TADSS & Gaming (14 Aug 12)

7. AAE 30-year plan on Army S&T Path Ahead to VCSA (3 Oct 12)

8. Army Training Strategy (15 Oct 12)

9. Better Buying Power 2.0: Continuing the Pursuit for Greater Efficiency and Productivity in Defense Spending (13 Nov 12)

Renewed Focus on Training & Agility in Acquisition

Army Force Generation - Update

- AC transition from 36-month to 24-month Readiness model

  - 12 Month BOG/12 month Dwell (AC)

  - Stress/competition for training resources
- Regional focused BCTs
- BCT organization changes from two to three-battalions
- 27 Regional Collective Training Capabilities (RCTC) locations
- Decisive Action Training Environment (DATE), Security Force Assistance Team (SFAT) , Mission Rehearsal Exercise Rotations at CTCs

RESET (3 mos) Force Pool	TRAIN/READY (9 mos) Force Pool	AVAILABLE (12 mos) Force Pool
• Soldier-family reintegration • Reconstitute personnel and equipment • Individual training • Comprehensive soldier fitness • Units designated as CEFs or DEFs	Progressive Readiness IAW ARFORGEN Aim Points and the collective training strategy for Full Spectrum Operations	Units prepared to deploy or to execute Combatant Commander's or other Army requirements

Mission Execution

Return from AVAILABLE Pool to the RESET pool

Army Training Strategy (15 Oct 12)

Targeted investments in Home station training, combat training centers, and TSS capabilities.

- Move from adhoc Blended training to Integrated Training Environment (system of systems)

- On-Demand, distributed collective training network

- Develop TADSS that operate over OP networks, mirror complexity, allow Cdrs to execute Training strategies

TSS Objectives (4/9)

1. Deliver LVC-IA to selected home stations

2. Modernize CTC-IS at NTC (15), JRTC (17), and JMRC (19)

3. Program Army Training Summit III req'ts, reallocate TADSS to Regional Collective Training Capabilities (RCTC)

4. Modernize other components of CTC TADSS Pilar

GEN Odierno

Training in a time of transition, uncertainty, complexity and austerity

Training Input from BG Mike Lundy, CAC-T

- *Collaboration between CAC & PEO STRI on technology initiatives and reducing barriers to training (i.e. Information Assurance)*

- *Breaking down stovepipes and enabling LVCG solutions across training domains (i.e. constructive wrap on ranges)*

- *Intuitive Weapon System designs – possible KPP to reduce associated training requirements*

- *Reduction of "guys in ties" running TADSS*

- *Comprehensive Aviation Training review*

BG Mike Lundy
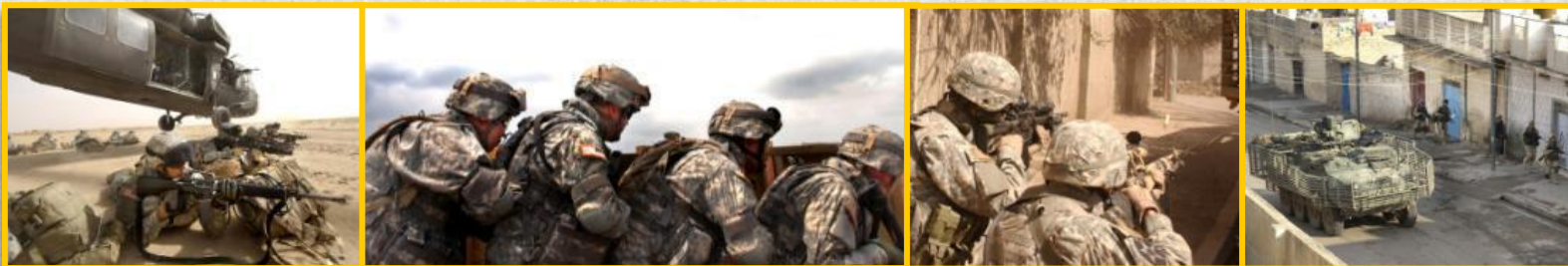
Infantry operating dismounted (spiraling to other dismounted formations)

Better Buying Power 2.0

Achieve Affordable Programs
- Mandate affordability as a requirement
- Institute a system of investment planning to derive affordability caps
- Enforce affordability caps

Control Costs Throughout the Product Lifecycle
- Implement "should cost" based management
- Eliminate redundancy within warfighter portfolios
- Institute a system to measure the cost performance of programs and institutions and to assess the effectiveness of acquisition policies
- Build stronger partnerships with the requirements community to control costs
- Increase the incorporation of defense exportability features in initial designs

Incentivize Productivity & Innovation in Industry and Government
- Align profitability more tightly with Department goals
- Employ appropriate contract types
- Increase use of Fixed Price Incentive contracts in Low Rate Initial Production
- Better define value in "best value" competitions
- When LPTA is used, define Technically Acceptable to ensure needed quality
- Institute a superior supplier incentive program
- Increase effective use of Performance-Based Logistics
- Reduce backlog of DCAA Audits without compromising effectiveness
- Expand programs to leverage industry's IR&D

Eliminate Unproductive Processes and Bureaucracy
- Reduce frequency of OSD level reviews
- Re-emphasize AE, PEO and PM responsibility and accountability
- Eliminate requirements imposed on industry where costs outweigh benefits
- Reduce cycle times while ensuring sound investment decisions

Promote Effective Competition
- Emphasize competition strategies and creating and maintaining competitive environments
- Enforce open system architectures and effectively manage technical data rights
- Increase small business roles and opportunities
- Use the Technology Development phase for true risk reduction

Improve Tradecraft in Acquisition of Services
- Assign senior managers for acquisition of services
- Adopt uniform services market segmentation
- Improve requirements definition/prevent requirements creep
- Increase use of market research
- Increase small business participation
- Strengthen contract management outside the normal acquisition chain – installations, etc.
- Expand use of requirements review boards and tripwires

Improve the Professionalism of the Total Acquisition Workforce
- Establish higher standards for key leadership positions
- Establish stronger professional qualification requirements for all acquisition specialties
- Increase the recognition of excellence in acquisition management
- Continue to increase the cost consciousness of the acquisition workforce – change the culture

Mr. Kendal
Acting DAE

Ms. Shyu
Army Acquisition Exec

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What's New about Live Training?

ICD "Live Training Transformation-Family of Training Systems" (August 2005)

Supporting PM TRADE Goals

- ✓ **Reduce Operational Cost & Complexity**
- ✓ **Align & Support Product Development (common standards, interfaces)**
- ✓ **Enhance Soldier Training**
- ✓ **Reduce Sustainment & Development Costs**
- ✓ **Increase Technology Agility**
- ✓ **Leverage Other Army Systems**
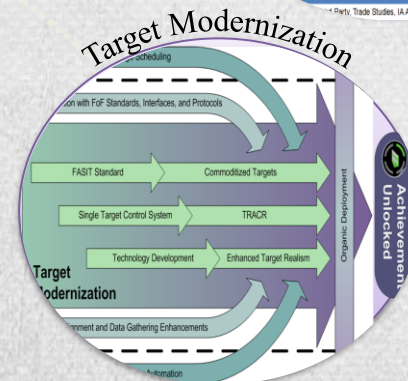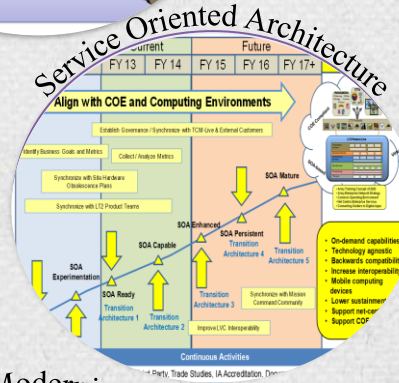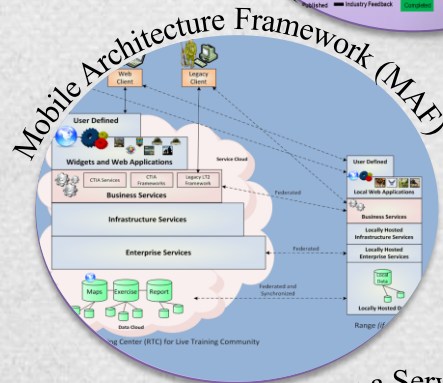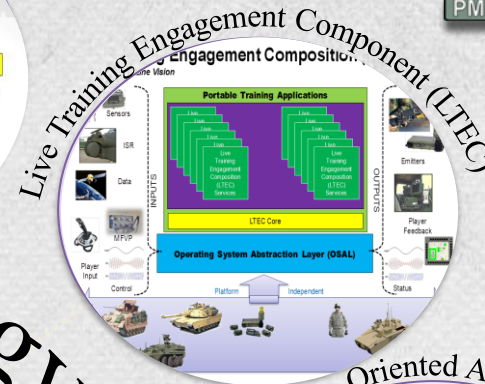- ▪ **Align to Army COE, Mobile Computing and Cloud Strategies**

✓ Directed in the LTS-FTS ICD

Recognized as the Army's Best Team in 2012 for Information Enabled Technology (~$400M cost avoidance)

FY12 AMSO M&S Award - Cross Cutting Category "Embedded Training and Development of Common Test and Training Solutions"

Technology Compass

- Embedded Training
- Live Training Engagement Component (LTEC)
- Live Training Standards
- Service Oriented Architecture
- Mobile Architecture Framework (MAF)
- Target Modernization
- Training as a Service (TaaS)
- Aviation Architecture
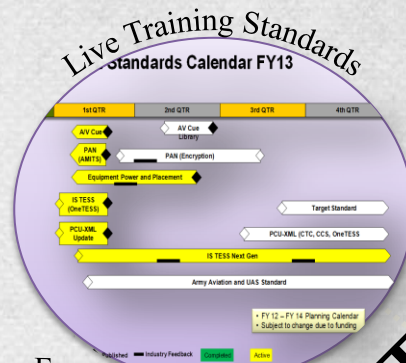
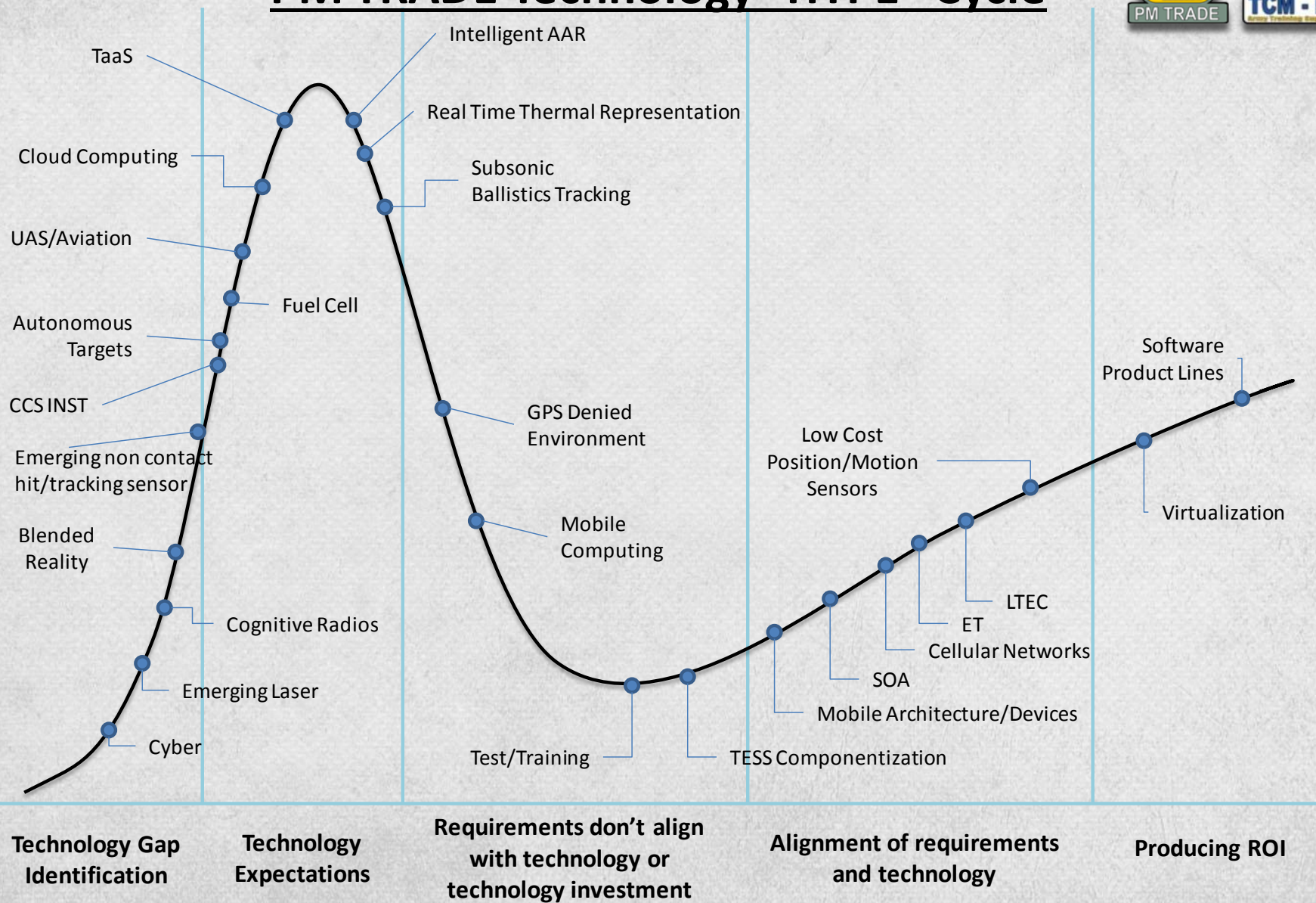# PM TRADE Technology "HYPE™" Cycle

- Intelligent AAR
- TaaS
- Real Time Thermal Representation
- Cloud Computing
- Subsonic Ballistics Tracking
- UAS/Aviation
- Fuel Cell
- Autonomous Targets
- Software Product Lines
- CCS INST
- GPS Denied Environment
- Low Cost Position/Motion Sensors
- Emerging non contact hit/tracking sensor
- Virtualization
- Blended Reality
- Mobile Computing
- Cognitive Radios
- LTEC
- ET
- Emerging Laser
- Cellular Networks
- SOA
- Cyber
- Mobile Architecture/Devices
- Test/Training
- TESS Componentization

Technology Gap Identification

Technology Expectations

Requirements don't align with technology or technology investment

Alignment of requirements and technology

Producing ROI

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*HYPE Cycle Concept source: Gartner Inc

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Product Line Update

PM TRADE Strategic Goals
- Reduce Operational Cost & Complexity
- Align & Support Product Development
- Enhance Soldier Training
- Reduce Sustainment & Development Costs
- Increase Technology Agility
- Leverage Other Army Systems
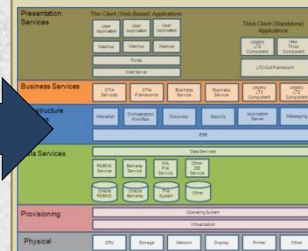- Align to Army COE, Mobile Computing and Cloud Strategies

Goals/Questions/Metrics
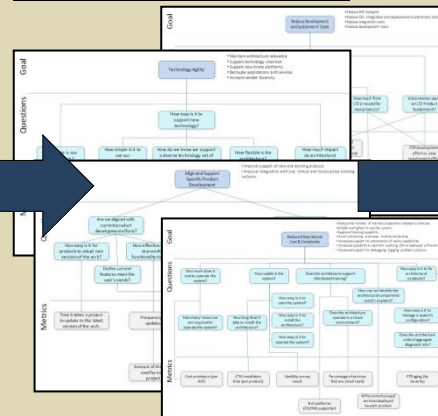
SOA Design Principles
- **Standardized Service Contracts**
- **Service Loose Coupling**
- **Service Abstraction**
- **Service Reusability**
- **Service Autonomy**
- **Service Statelessness**
- **Service Discoverability**
- **Service Composability**

Target Architecture

## Transition Architectures Defined to Align with Capabilities Required by LT2 Products

Transition Architecture 1
Land Navigation Prototype

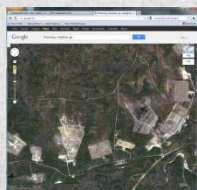**Transition Architecture 2**
Full Land Navigation (STS) Use Case

Transition Architecture 3
Full TRACR Use Case

Transition Architecture 4
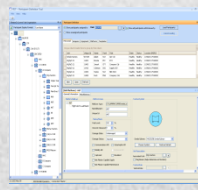Full HITS Use Case

Transition Architecture 5
Supports Regional Training Center Use Case
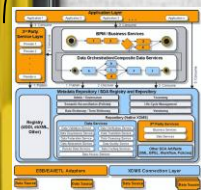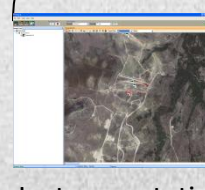
SOA Infrastructure

Web-Based 2D Map

Participant Definition Tool

Mobile Device Support

Complete 2D Map, Alerts, Observations

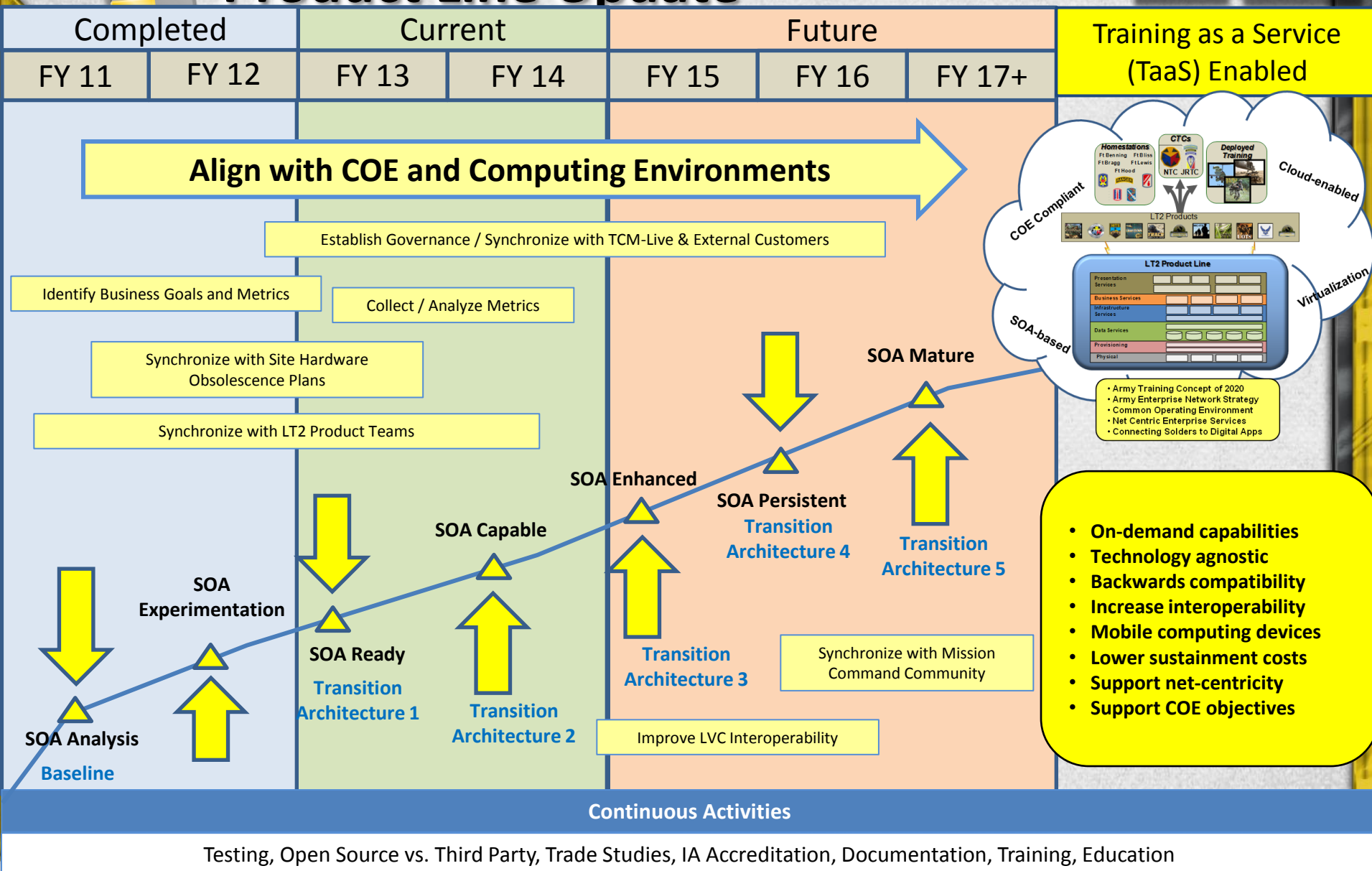Instrumentation / Targets, Tactical Voice, Indirect Fire
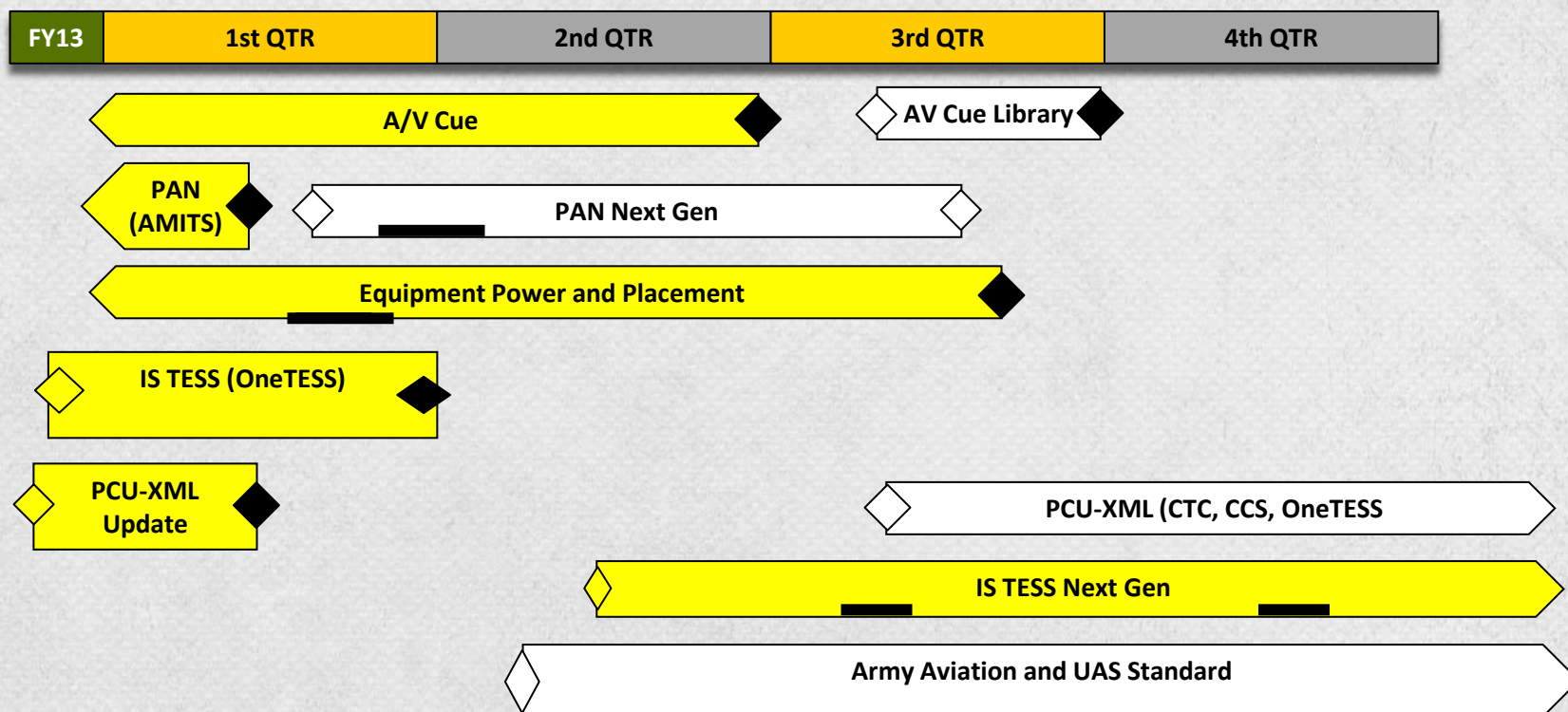
Exercise Planning & AAR

Supports full CTC-IS, Distributed Training, Deployable SOI

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Product Line Update

Completed		Current		Future			Training as a Service (TaaS) Enabled
FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17+	

Align with COE and Computing Environments

Establish Governance / Synchronize with TCM-Live & External Customers

Identify Business Goals and Metrics

Collect / Analyze Metrics

Synchronize with Site Hardware Obsolescence Plans

Synchronize with LT2 Product Teams

SOA Mature

SOA Enhanced

SOA Persistent
Transition Architecture 4

SOA Capable

Transition Architecture 5

SOA Experimentation

SOA Ready
Transition Architecture 1

Transition Architecture 2

Transition Architecture 3

Synchronize with Mission Command Community

SOA Analysis
Baseline

Improve LVC Interoperability

- • Army Training Concept of 2020
- • Army Enterprise Network Strategy
- • Common Operating Environment
- • Net Centric Enterprise Services
- • Connecting Solders to Digital Apps

- • **On-demand capabilities**
- • **Technology agnostic**
- • **Backwards compatibility**
- • **Increase interoperability**
- • **Mobile computing devices**
- • **Lower sustainment costs**
- • **Support net-centricity**
- • **Support COE objectives**

Continuous Activities

Testing, Open Source vs. Third Party, Trade Studies, IA Accreditation, Documentation, Training, Education

Standards/ICD Calendar

FY13	1st QTR	2nd QTR	3rd QTR	4th QTR

A/V Cue

AV Cue Library

PAN (AMITS)

PAN Next Gen

Equipment Power and Placement

IS TESS (OneTESS)

PCU-XML Update

PCU-XML (CTC, CCS, OneTESS

IS TESS Next Gen

Army Aviation and UAS Standard

◇ Start of Effort   ◆ Published   ▬ Industry Feedback   Planned   Active

Live Training in 2012

Fort Carson, CO

Fort Irwin, CA

Fort Bliss, TX

Fort Hood, TX

South Korea

Rodriquez Range
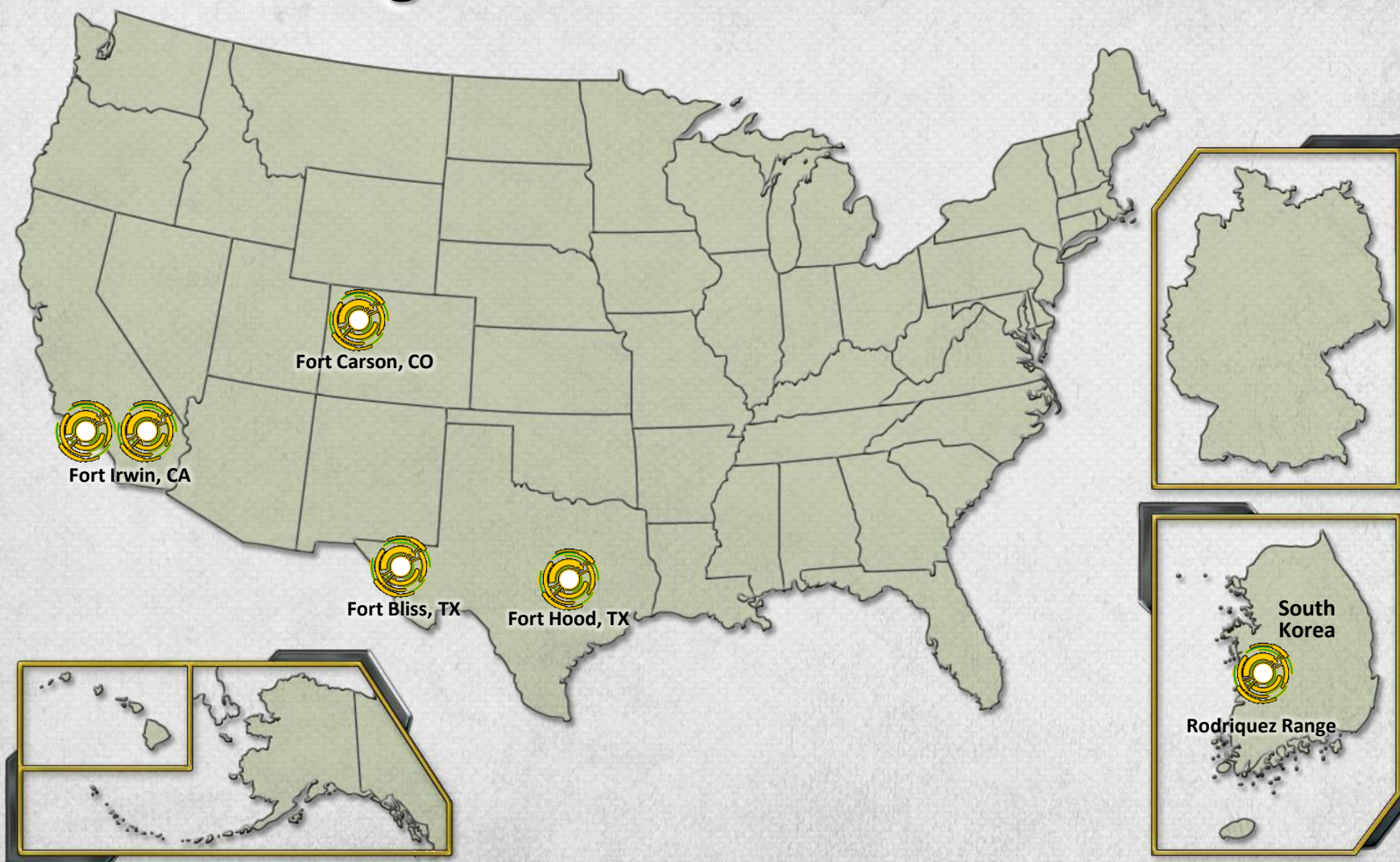
Click on location for more information

Foreign Military Sales

Country	System	Case Value ($K)
Latvia	CLS	1,430
Lithuania	MILES	3,220
Ukraine	MILES	2,470
Georgia	MILES	1,990
Georgia T-72	MILES	1,290
Armenia	MILES	1,980
Romania	CLS	1,040
Romania	MMOUT	2,120
Romania	MILES/CLS	3,030
Croatia	MILES	5,180
Bulgaria	MILES DITS	3,140
Saudi Arabia	MILES	49,780
Saudi Arabia	Range Mod	30,550
Saudi Arabia	MOUT	26,240
Saudi Arabia	TWGSS	760
Jordan	MILES/IHITS	23,920
Egypt	CTC	48,610
		206,750

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Live Training Lines of Operation

Instrumentation Networks

O/Cs

Force-On-Target

Targets

Field TOC

Force-On-Force

CTC ExCon / Homestation / Live Fire Range Ops. Center

Battlefield Effects

Urban Operations

ExCon & Comms	Simulated Fire	Live Fire
ExCon, AAR, RF Comms. ABCS, & Network Data Management	Combined Arms Engagement Pairing BLUFOR & OPFOR	Instrumented Urban Operations, & Battlefield Effects
PM CTIS T-IS	PM LTS A-TESS	PM DT FASIT

Standards Management (CTIA, A-TESS, FASIT) - APM TRADE

Requirements Roadmap

Force on Force LOE

Force on Target LOE

FY	Near Focus Area		Mid-Term Focus Area					18
	11	12	13	14	15	16	17	

Requirement Documents

- DMPRC ORD → IR CPD
- NGATS ORD → FASIT CPD
- IMTS ORD

Standards

- COE and Computing Environments
- SOA — Capable — Enhanced — Persistent — Mature

UOTS — Contract Award / Contract Award

DRTS — Contract Award / Contract Award

CPM — Contract Award

CARTS — Contract Award / Contract Award

ATS II — Contract Award / Contract Award

BES II — Contract Award / Contract Award

Training as a Service (TaaS) Enabled

SOA
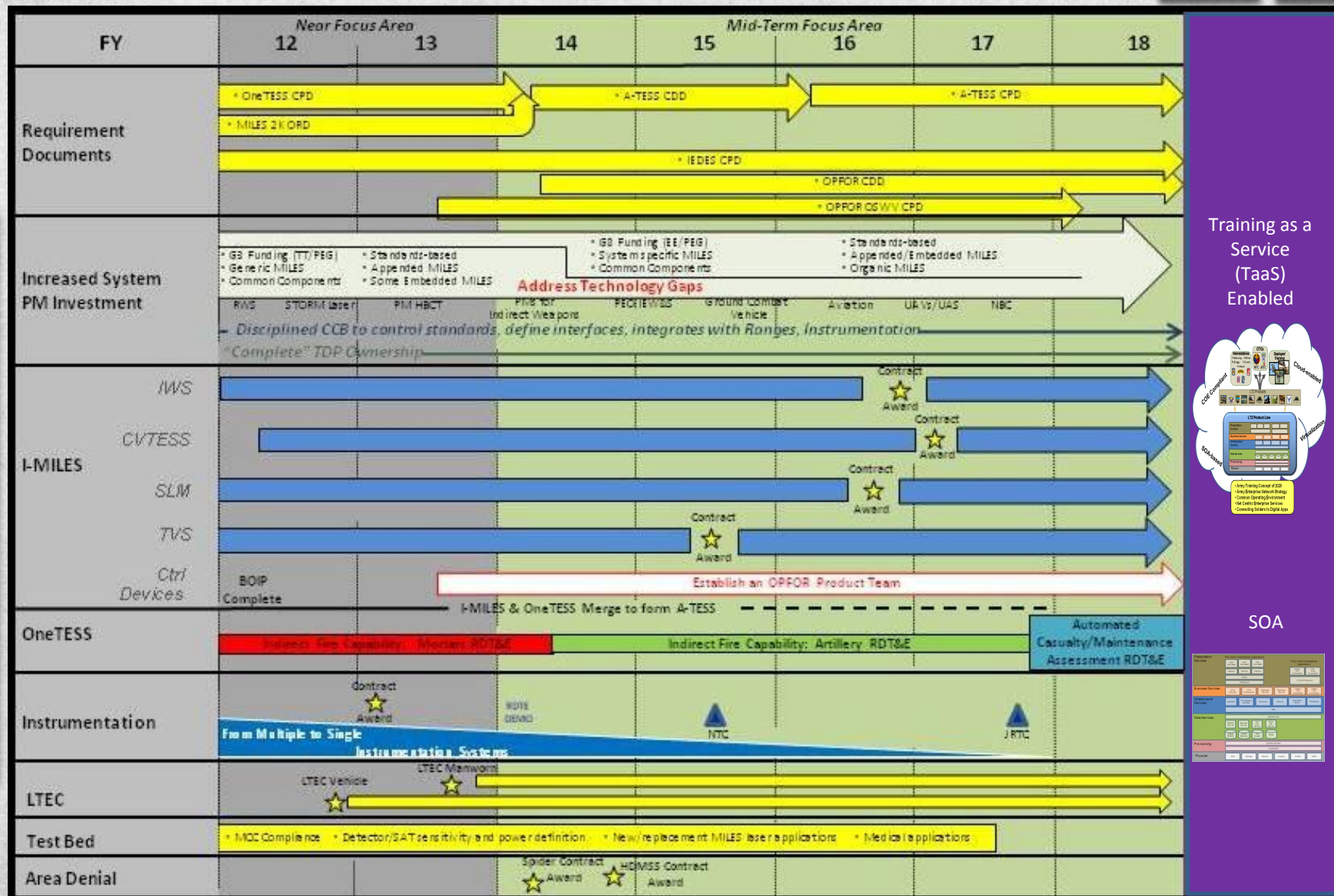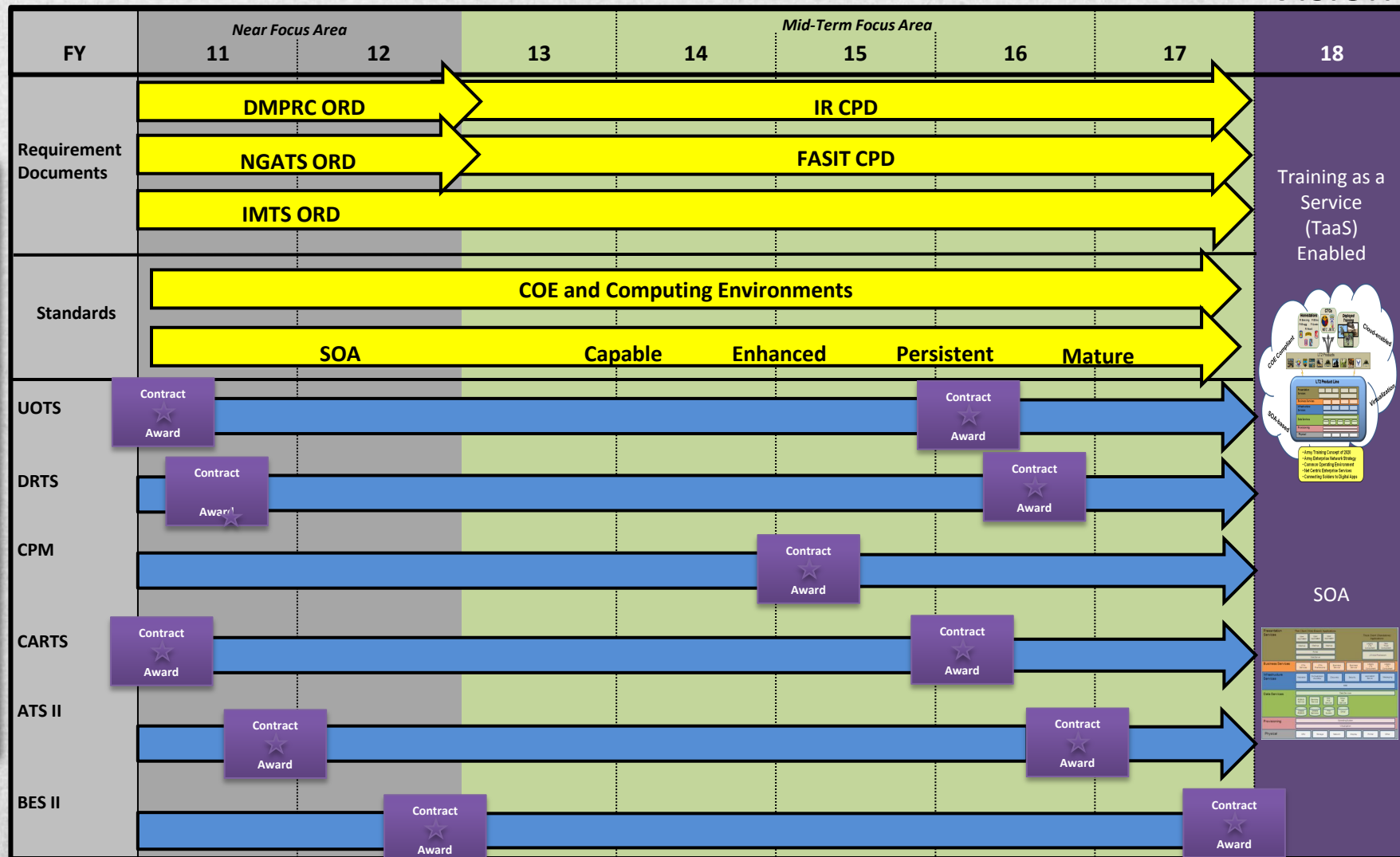
Industry Engagement Opportunities

Industry

Industry Workshops/Breakfasts

Feb 6, 0700 – Next Industry Breakfast at Oviedo IHOP – RSVP
rob.wolf1@us.army.mil

Feb 6, PAN Standard Evolution - Orlando – PIII 321

Feb 7, Battery Standard Initiation – Orlando – PIII 321

Feb – Date TBD - ATESS Requirement Update, Orlando

PM TRADE

Industry input throughout 2012 reflected in internal PM TRADE processes to improve our quality and consistency.

Implemented internal program planning gates across the PM/PdM and matrix offices.

- ✓ **Initial Program Planning Round Table**

- ✓ **Technical Interface/ Interoperability Review**

- ✓ **Acquisition Strategy Planning Session**

- ✓ **RFI & Synopsys Review – Market Research**

- ✓ **Technical Peer Reviews**

- ✓ **Sources Sought & Industry Days**

- ✓ **Pink Team → Initiates PALT**

LT2 Portal Update

Contact Information

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LIVE TRAINING - IT'S NO GAME
REAL SOLDIERS, REAL ACTION, REAL SWEAT

Visit the Live Training Community Portal at: LT2Portal.org