



Dr. Richard Wittstruck
Director SoSE, PEO IEW&S

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PEO
IEW&S

National Defense Industrial Association

Program Executive Office
Intelligence, Electronic Warfare & Sensors

richard.h.wittstruck.civil@mail.mil
443-861-7808

Intelligence - Electronic Warfare - Sensors - Situational Awareness

UNDERSTAND the Battlefield Enable Decisive ACTION

Mission:

Become More Effective and Efficient

*rapid situational understanding and
decisive action.*

Vision:

*A team of dedicated professionals driving
innovation and exceptional value in
understanding and reshaping the Battlespace*

PEO
IEW&S



- Building the Team internal and external to the PEO
- Integration / System of Systems
- Returning Discipline to our Processes
 - _ Planning the PEO Portfolio for the Long Term
 - _ Continue responsive support to the Current Fight
 - _ Execute Intent of USD (ATL) Better Buying Practices

Don't fear change -- embrace it.

Anthony J. D'Angelo
Founder of The Collegiate EmPowerment Company

Yesterday versus Today/Tomorrow

Current

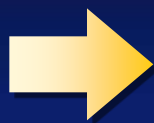
Future Force

Single "INT" Sensors



Multi-INT Sensor Capability

Multiple Data Outputs



Correlation/Fusion of Multiple Sensor Data Inputs into a Single output

Platform Centric, Stove Piped Sensor Architecture



Vertically and Horizontally Integrated Sensor Architecture

Lengthy Sensor-to-Shooter Processing



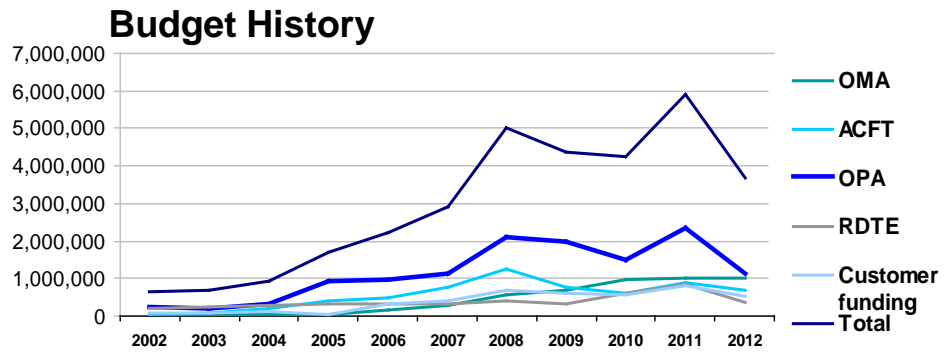
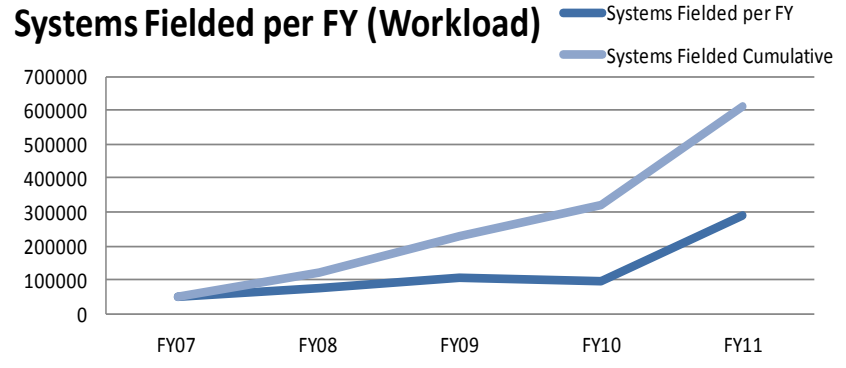
Real Time Sensor-to-Shooter Decision Process

Limited Red Force Picture

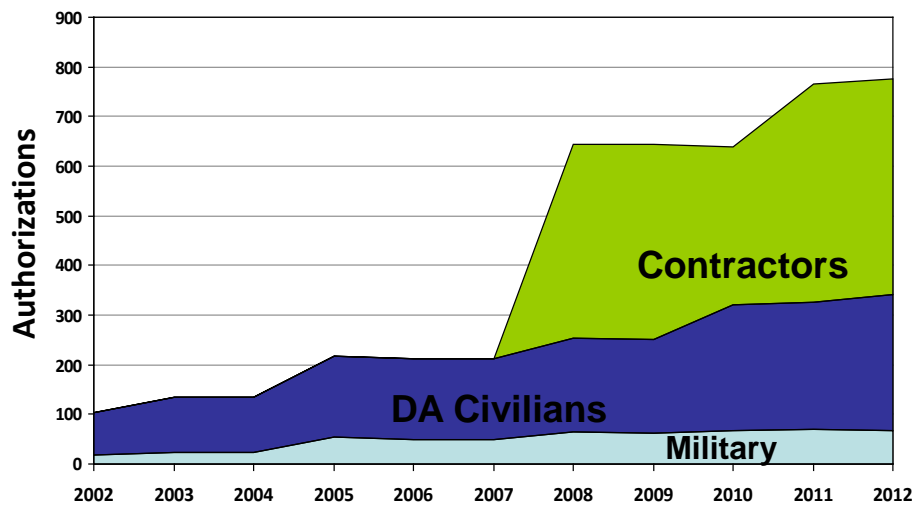


Timely Red and Blue Picture for Small Unit Engagements

Business Model Challenges



PEO IEW&S Growth & Drivers



PEO IEW&S Mission Growth

2002 Programs:	2006 Programs:	2010 Programs:
40	60	112
2 ACAT I 3 ACAT II 29 ACAT III 5 ACTD's 1 Recap Program	2 ACAT I 0 ACAT II 46 ACAT III 1 Pre-MAIS 11 QRCs	5 ACAT I 6 ACAT II 49 ACAT III 5 Pre-MDAP/MAIS 50 QRCs

Mission Area Capabilities

RSTA

Wide Area Surveillance,
NAI/TAI Surveillance, Local Surveillance
Air Defense, Airborne Sensor
Hidden Object Detection/
MOUT
Enemy Communication
Detection
Terrain Mapping
UAV Payloads
Own the Night Technology
Tactical Responsiveness
Sensor Availability

CSP 	LRAS3 	MARSS 	PTDS 	RAID Tower and Aerostat	GRCS 	ARL 	LYNX/ STARlite 	JTT-IBS 	CGS-JTT
PGSS Navy	TF ODIN/ ARMS/Highliner/ Constant Hawk 	GEO Spatial 	SGF 	ENFIRE 	TPQ-37 	TPQ-36 	EQ-36 	EMARRS TSP UAV Payload 	DCGS-A

Force Protection

HUMINT
Platform Active Protection Support
Local Security
Enemy Sensors Detection
Enemy Firing Detection
Method of Attack/Survivability

CREW W-DUKE (CREW-2) 	Air Vigilance 	LCMR 	Giraffe 	CMWS 	Cerberus 	Phoenix Lights 	
Duke V.3 	CVRJ 	Route RECON Kit 	Double Shot 	Boomerang 	HFDS 	ATIRCM 	JCIMS
CRAM 	PEO C3T 	MMBJ 					

Situational Awareness

Battlefield Radar
Unattended Ground Sensors
Robotic and Unmanned Sensors
Ground Based SIGINT
HUMINT Collection

RDISS 	Imagery Work Station 	HUMINT/ CHIMS 	Prophet 	Language Translator 	UTAMS 	DVE 	DTSS 	Prophet Hammer/ Triton/Cobra
JPM Guardian 	UGS 	FPS/TASS 	Prophet Enhanced 	Wolfhound 	DAGR/PLGR 	Profiler 		

Integrates
RSTA/FP/SA

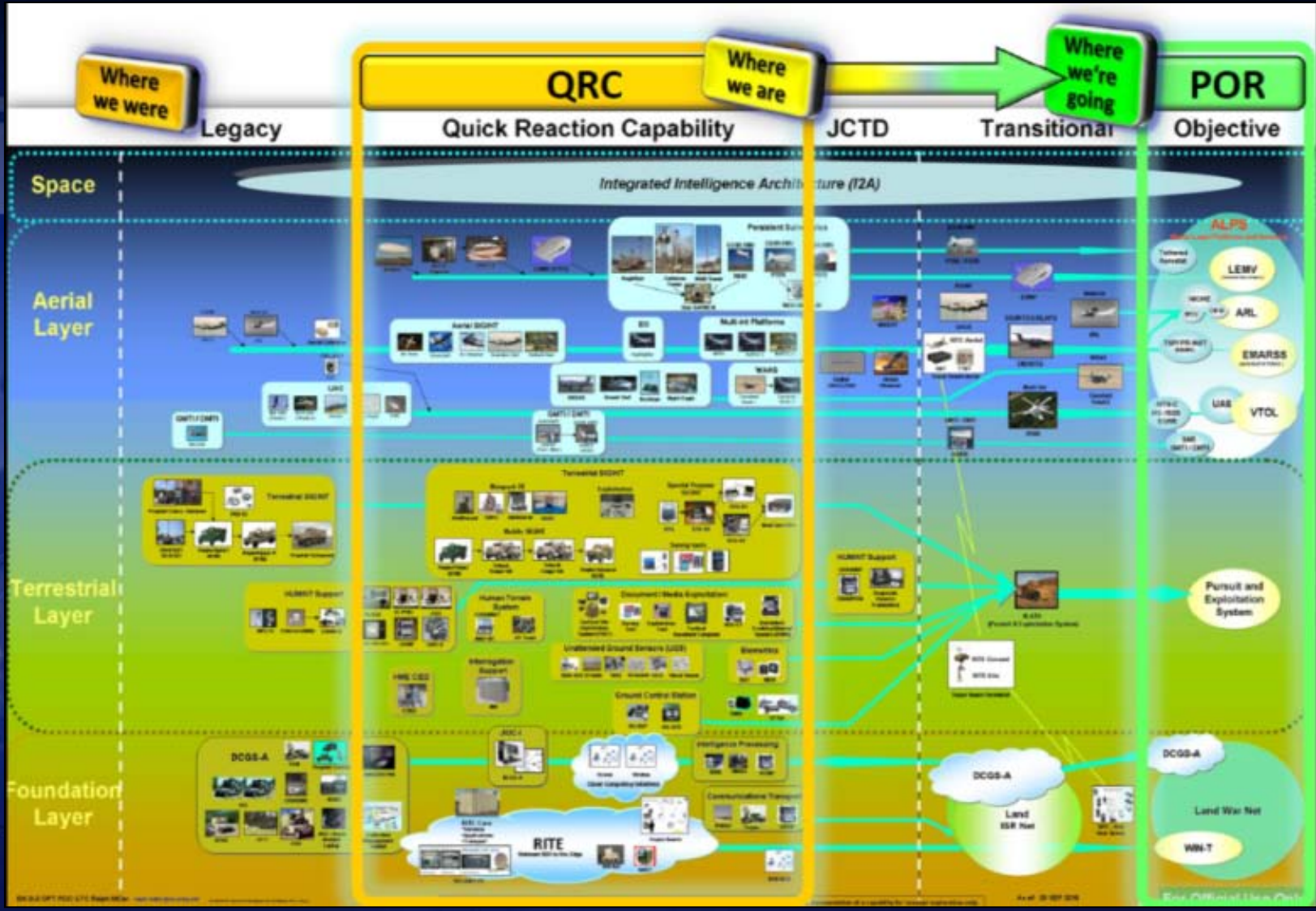
**PSDS2/
SGS**

C5ISR

= PORs Program of Record	= QRCs Quick Reaction Capabilities	= Joint Joint Capabilities Integrated
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JPM Guardian

Army ISR Systems Migration Strategy



Analyze All the Data, All the Time

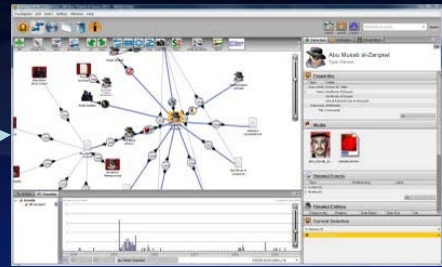


Lexical Searches,
Boolean Search Attributes, or
Properties Based Filters



Working Set

Today's analytics must filter data

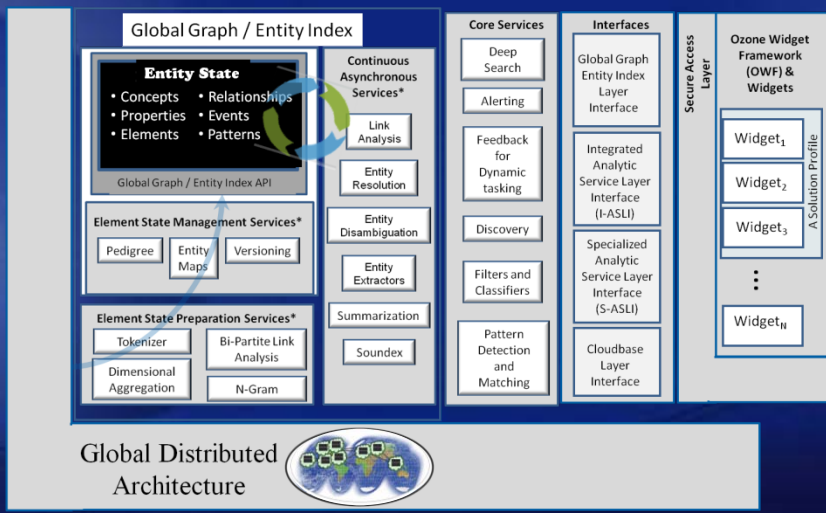
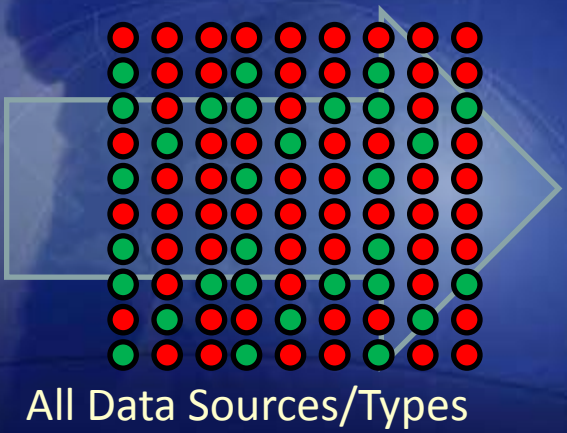


Product
from filtered data

Tools / Analysis

With the Cloud, we do not have to filter to get a sub-set / working set

Cloud Analytics

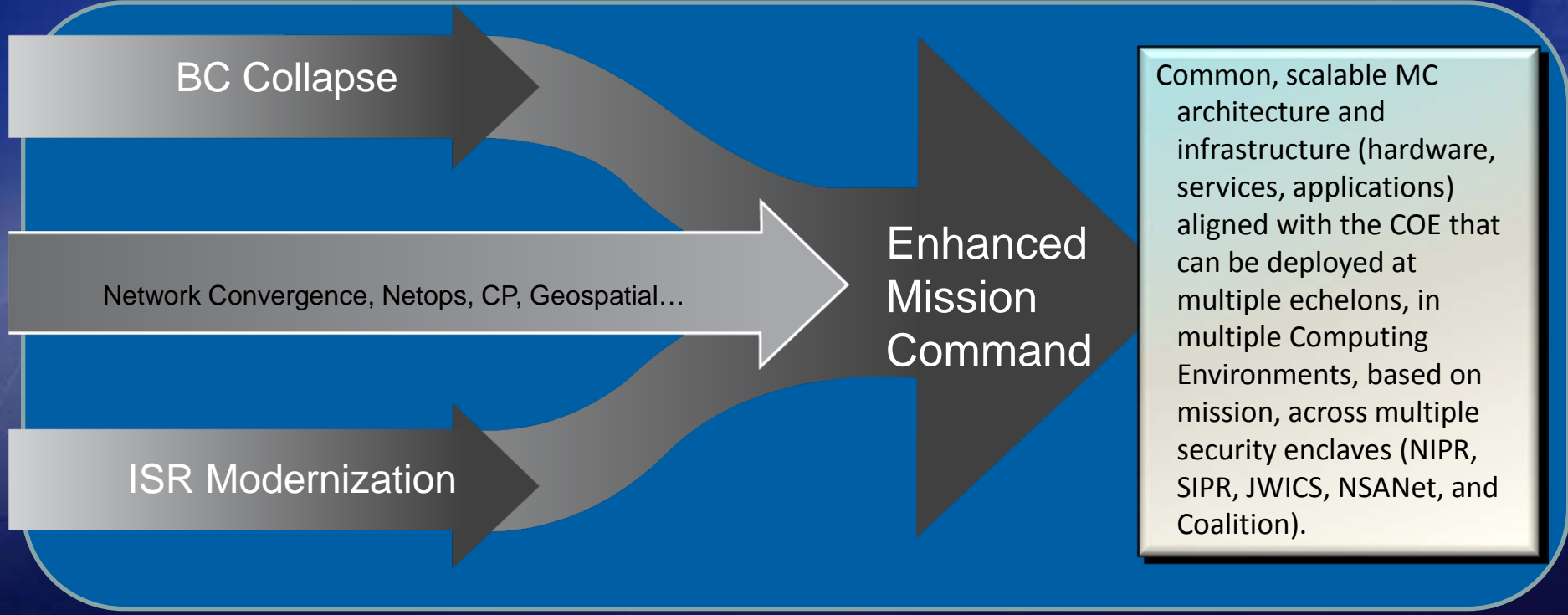


Analysis over the
entire corpus –
follow the analytic
threads without
re-loading data

Enhanced Mission Command

Scope:

- Enhanced Mission Command is an operational capability that integrates Intel, Maneuver, Fires, Sustain and Protect functional areas
- Desired End State: Common, scalable MC architecture and infrastructure (hardware, services, applications) aligned with the COE that can be deployed at multiple echelons, in multiple Computing Environments, based on mission, across multiple security enclaves (NIPR, SIPR, JWICS, NSANet, and Coalition) – providing successive increases in operational effectiveness
- Synchronized Fielding Schedules
- Security Policy and Accreditation
- Requirements Deconfliction and Trades
- Infrastructure Standardization
- Data Architecture Consistency
- Integration and Migration of Apps & Services to Common Infrastructure
- Enterprise Capability
- Risk Mitigation
- Resourcing
- Trade Space
- JIIM



C5ISR Scope and Status

Currently being executed by WIN-T

Currently being executed by PM NV/RSTA

Phase 1 – Thicken Network

“Build Network”

SCI to BN
 8MBS to BN
 Regional Broadcast (DVB-S2)
 Full Motion Video

Aerial Layer Network Extension

➔

Critical/Immediate Support to Warfighter

Phase 1 provides the C5ISR backbone to thicken overall network bandwidth and establish conditions to increase capability, capacity, and range extension of current capabilities.

Validated

TF C5ISR is currently:

- Integrating technical architecture of all Phase 1 capabilities
- Synchronizing schedules of currently validated & resourced Phase I capabilities
- Executing Aerial Layer Network Extension

Future capabilities to be addressed upon validation and resourcing

Advanced handheld form-factor Blue/Red COP & Tactical Chat FBCB2/BFT compatible Day and night len's on Aerostats Aerial & Terrestrial Layer Extension Advanced biometrics collection devices	Phase 2 – Increase Situational Awareness “Fill Network” ➔ Requires additional analysis & resourcing	Phase 2 provides increased situational awareness to the Tactical Edge by providing advancements to COP & ISR.
PSDS2 Web Browser Consolidation Dynamic ISR asset re-tasking FBCB2/BFT compatible Auto-tracking & re-cueing Portable ISR sensor Knowledge Management	Phase 3 – Advanced C5ISR Capabilities “Extend Network” ➔ Requires additional analysis & resourcing	Phase 3 provides advanced sensor integration with existing PORs. KM software and sensor integration provides increased actionable intelligence to the edge.
Advanced Terrestrial Networking Advanced Aerial Networking Advanced C2 On-The-Move	Phase 4 – Advanced networking & C2OTM “Extend Network” ➔ Requires additional analysis & resourcing	Phase 4 provides advanced terrestrial and aerial networking capabilities are explored for integration into the CJOA-A architecture along with C2 On-The-Move

Deferred

Increased
Combat Power
with Netted
Sensors

Tactical Eyes and Ears for the Warfighter

- Fielding *World Class Sensor Capabilities* That are Responsive to a Diverse Threat Environment
- Developing High Fidelity Sensors That Provide a *Common Visualization* of the “Now” Battle
- Planning for the Future Now - Focused on the Army’s Transformation Objectives
 - *Smaller, Lighter*
 - *Higher Resolution, Increased Range*
 - *Multi – INT PED*
 - *ATR*
 - *Over the Horizon Capability*
 - *Netted*