PEO IEW&S Overview

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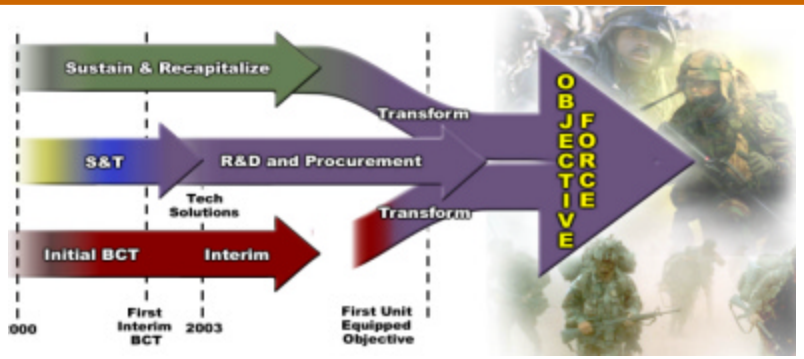
Outline

- Vision
- Organization
- Transformation
- Sensor Grid
- Technology Needs
- Programs
  - DCGS-A
  - Signals Warfare
  - NV/RSTA
- Virtual Acquisition Planning for Industry

Army Vision



National - Joint - Combined

A strategically responsive force that is dominant across the full spectrum of operations….

…See First…

Understand First…

Act First…

Finish Decisively!

PEO IEW&S Organization

IEW&S
PROGRAM EXECUTIVE OFFICE

PM Signals Warfare

PM Aerial Common Sensor
PM Prophet
PM Information Warfare

PM DCGS-A

PM CGS & Datalinks
PM CHIMS

PO JPSD

PM Navigation Systems

PM TIMS
PM GPS/DAGR

PM NV/RSTA

PM FLIR
PM Robotic and Unmanned Sensors
PM Firefinder

PM Tactical Applications

PM Aviation Systems

PM IRCM
PM RFCM

PM C&ISS

Actionable Intelligence Capabilities

Dominant Maneuver

- Airborne
- Ground-Based

GR/CS

ARL

TUAV Payloads

ACS

MARS

TESAR

TSP

Prophet

CGS

LRAS3

2nd Gen FLIR f/ Bradley

DCGS-A

PLGR

DVE

Precision Engagement

- Targeting
- Sensor-to-Shooter

TUAV Payloads

Profiler

GR/CS

CGS

Firefinder

DCGS-A

LLDR

JTT

2nd Gen FLIR f/ Abrams

Actionable Intelligence Capabilities

Force Protection

- **Full Dimension**

CID Panels

BCIS

2nd Gen FLIR

LVRS

LRAS3

TUAV Payloads

ACS

Technologies

- SIGINT
- Lasers
- REACH
- GPS
- Multi-Sensor Fusion
- RF/IR Counter-measures
- SAR
- HSI
- Cross Cueing
- AiTRs
- MTI
- Magnetic Sensors
- FOPEN
- IR

Army Transformation – Where We Are Going…

Early Situational Understanding in Advance of the Fight

- Enhanced **Indications and Warnings** (I&W) which Enables **Operational Maneuver from Strategic Distance**
- **Superior Intelligence** to Better Manage **Transition to Combat** on our Own Terms
- **Enabling ISR Sensors** for Early Detection-Targeting is a 2nd Priority

Tactical Overmatch in Any Situation

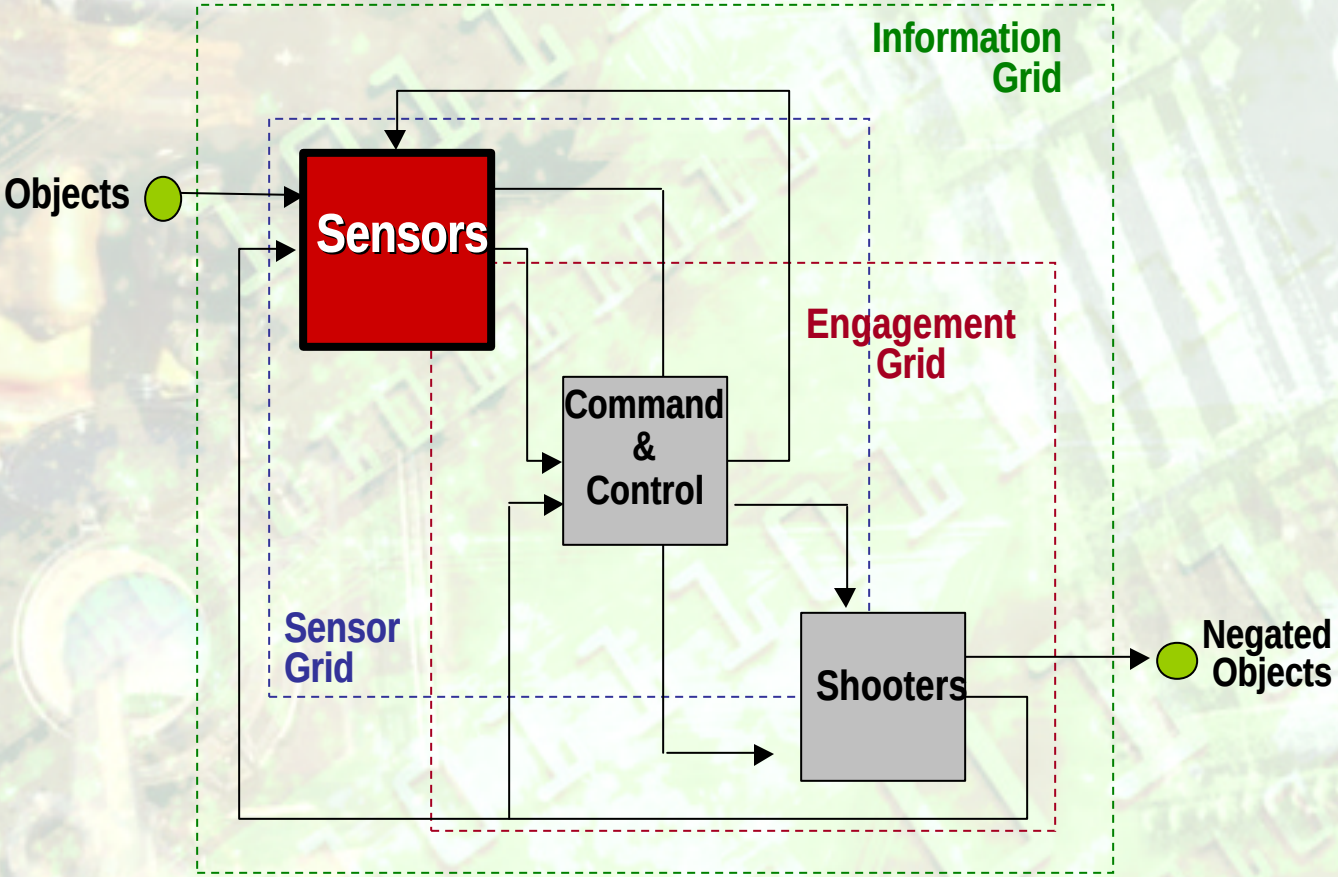
- Will Operate with a **'Red Zone'** that is Considerably **Larger** than the 3-5km Envisioned in Current Doctrine
- **Embedded RSTA Sensors** that Allow us to **See Further,** and Provide Ability to Engage with **Long-Range Fires**
- **Full Spectrum Dominance** in Both **Urban** and **Open** Environments

High Tempo – Continuous, Simultaneous Engagements

- **Simultaneous Engagement** and **Distributed Operations**
- **Will Control More Space** with Less Manpower and **Reduced Foot Print**
- **Integrated, Layered Sensors** enables **Adaptive Dominance**

Army Transformation – Where We Are Going…

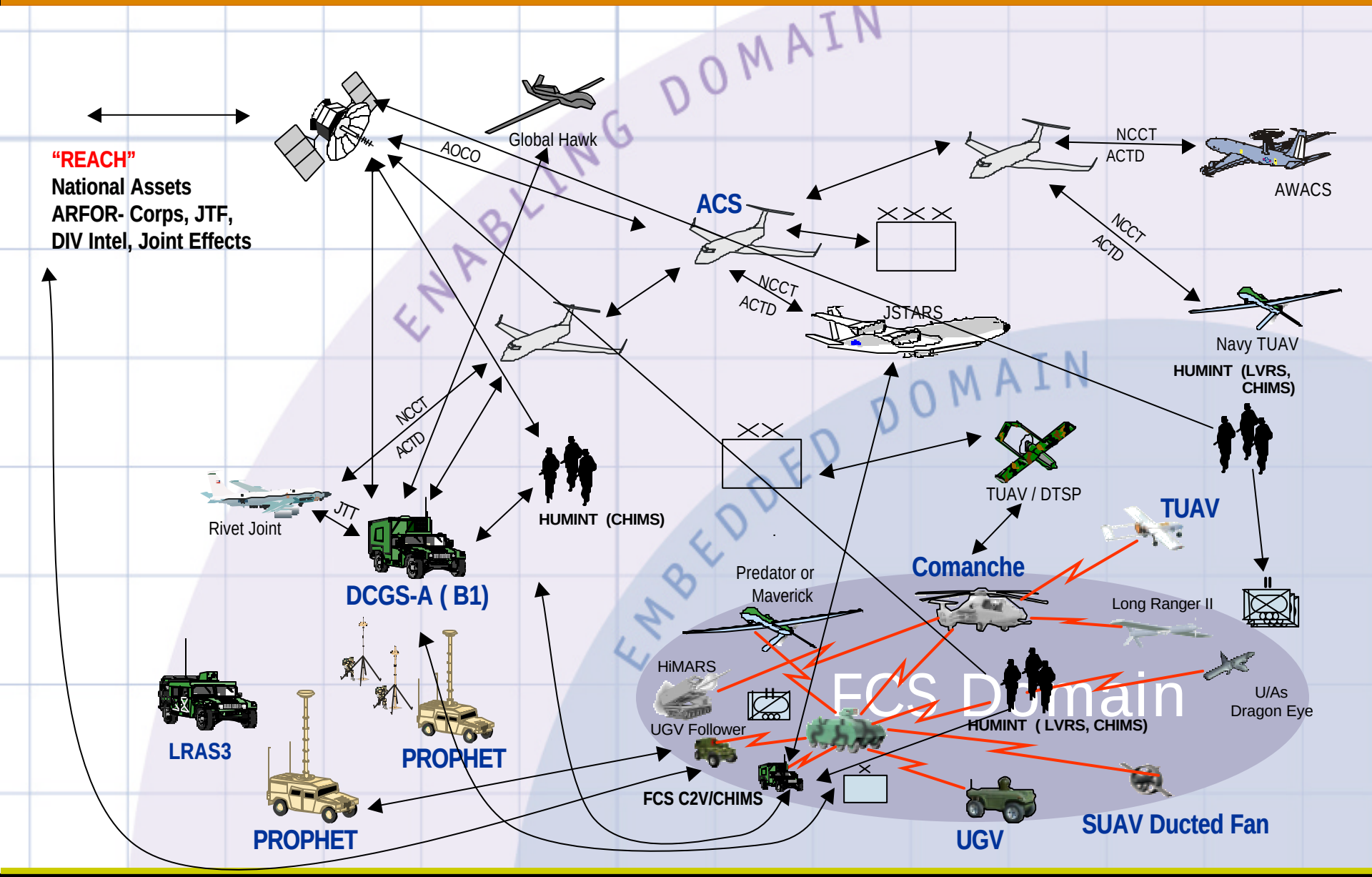
Netted Sensors Provide Actionable Intelligence



"In the fundamental shift to network-centric operations, sensor networks emerge as key enabler of increased combat power."

- Network Centric Warfare, 2nd Edition, Alberts, Garthska, Stein

Sensor Grid


ENABLING DOMAIN
EMBEDDED DOMAIN
"REACH"
National Assets
ARFOR- Corps, JTF,
DIV Intel, Joint Effects
AOCO
Global Hawk
ACS
NCCT
ACTD
AWACS
JSTARS
Navy TUAV
HUMINT (LVRS, CHIMS)
Rivet Joint
JTT
DCGS-A (B1)
HUMINT (CHIMS)
TUAV / DTSP
TUAV
Comanche
Predator or Maverick
Long Ranger II
HiMARS
UGV Follower
FCS Domain
HUMINT (LVRS, CHIMS)
U/As Dragon Eye
LRAS3
PROPHET
FCS C2V/CHIMS
UGV
SUAV Ducted Fan

Technology Needs for the Objective Force

IMINT

- Uncooled focal plane arrays
- 3rd Gen FLIR (higher resolution, longer ranges
- Aided target recognition
- Data fusion and correlation

MASINT

- Less complex man-machine interface
- Cross cueing to more mature sensors
- Millimeter Wave Imaging (through the wall)
- Magnetic sensing

SIGINT

- Efficient Low Band arrays
- Detecting Low Band Emitters
- Sharing COMINT resources
- Embedded precision geo-location (Multi-Ship operations)
- Beam forming interference cancellation (discriminating military targets in high density non-military environments)

Technology Needs for the Objective Force

Masked Target Sensors	• **Locating CC&D targets** • **Locating Buried Mines**
National Tactical Integration	• **Cooperative operations from manned and unmanned IMINT and MASINT platforms** • **Airborne Overhead Cooperative Operations (AOCO)** • **Network Centric Cooperative Targeting (NCCT)**

PEO IEW&S (PM DCGS-A)
Distributed Common Ground Station - Army (DCGS-A)

Program Objective:

An integration of existing and future ISR ground stations to produce a common modular, scalable, and Multi-INT joint interoperable architecture and capability.

Key Features:

- **Improve Warfighter Situational Awareness/Understanding**
- **Improved Intel Dissemination at all Echelons**
- **Reduced Intel Forward Footprint**
- **Network Centric System of Systems Approach**
- **Interoperability and Data Sharing**
- **Multi-INT TPED**
- **Interim DCGS-A Based on Legacy Systems**
- **AoA to Determine Objective DCGS-A Approach**

Key Players:

PEO IEW&S	MDA
USAICS	DCGS-A Requirements
ASPO	TES Legacy System
PM SW	GRIFN Legacy System
PM DCGS-A	CGS Legacy System CHIMS Legacy System
PM I&E	ASAS Legacy System

Program Major Milestones:

DATE	EVENT
2QFY 02	Modify Legacy System Contracts
1QFY 03	Enable INSCOM (513th MI Bde w/DCGS-A)
2QFY 03	Objective DCGS-A ORD Approval
3QFY 03	Objective DCGS-A MS B
4QFY 03	Interim DCGS-A at XVIII ABC
FY 04	Interim DCGS-A to III Corps
FY 06	Objective DCGS-A MS C
FY 09	Objective DCGS-A IOC

Key Considerations: FCS Synchronization
Sensor Synchronization
Unit Set Fielding

Contract Opportunity

Objective: **Provide Integrated Multi-INT Common Ground Station for the Objective Force**

Contract Type: **Competitive**

Estimated Value: **TBD**

Key Milestones: **3QFY03 MS B; 4QFY03 Contract Award**

Technical Contact:

Acquisition Contact: **TBD**

Solicitation # or RFQ #: **TBD**

"The whole of military activity . . . the end for which a soldier is recruited, clothed, armed, and trained . . . is simply that he should fight at the right place and at the right time."

Clausewitz

See First…

Understand First…

Act First…

Finish decisively…

Must Have ISR!