

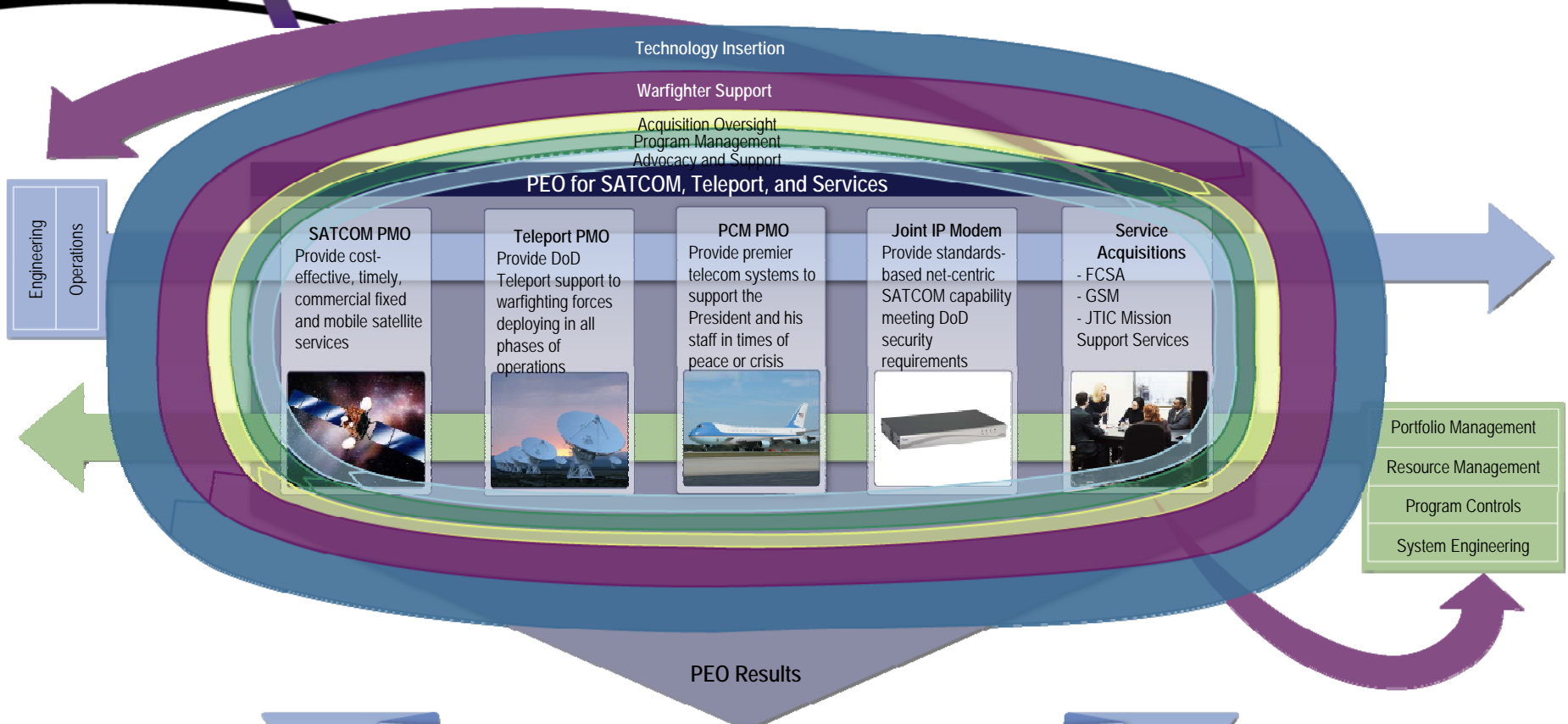


Defense Information Systems Agency

A Combat Support Agency

SATCOM, Teleport, and Services Program Executive Office

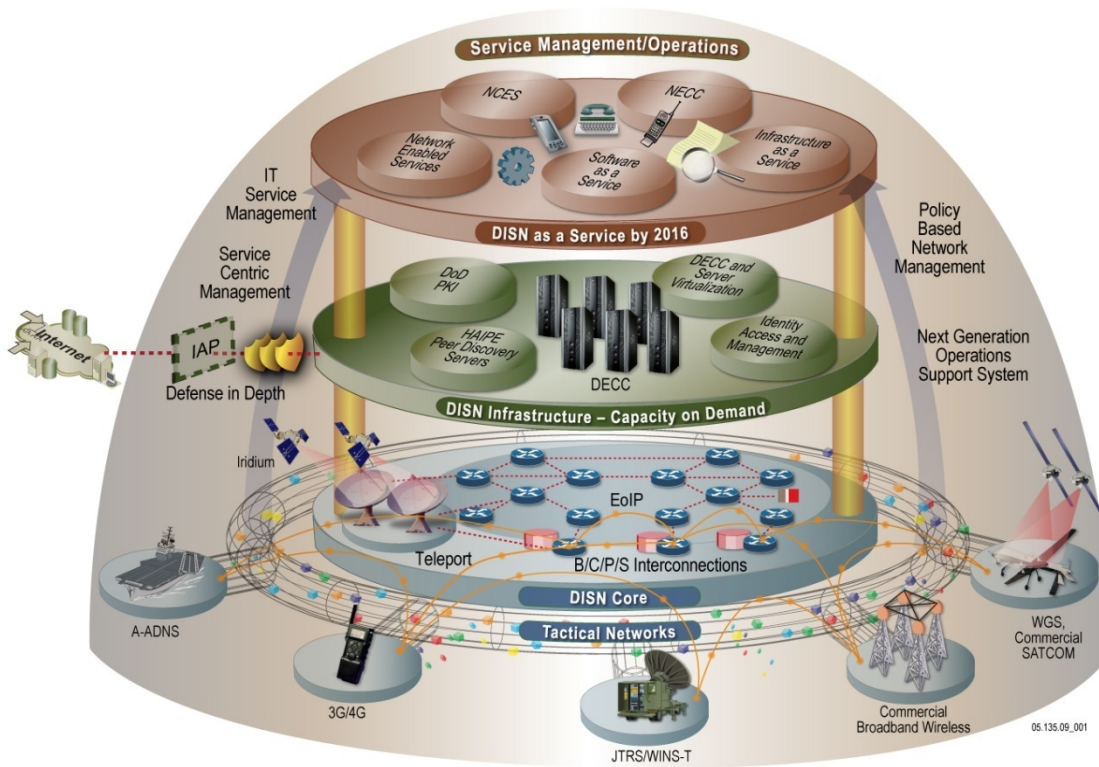
**Mr. Bob Clayton
Acting Deputy Director
SATCOM, Teleport, and Services
Program Executive Office**



- ✓ Offers synchronization of SATCOM and Teleport components
- ✓ Optimizes assets and services provided
- ✓ Leverages agency engineering and operation capabilities
- ✓ Provides stewardship of resources
- ✓ Presents strategic alignment of related programs
- ✓ Facilitates greater customer focus

Any Information Flow, from Any Source, to Any Gateway, to Any Uplink, to Any Satellite, to Any Deployed Terminal, to Any User, at Any Time, for Any Reason, Anywhere in the World

DISA GIG Strategy

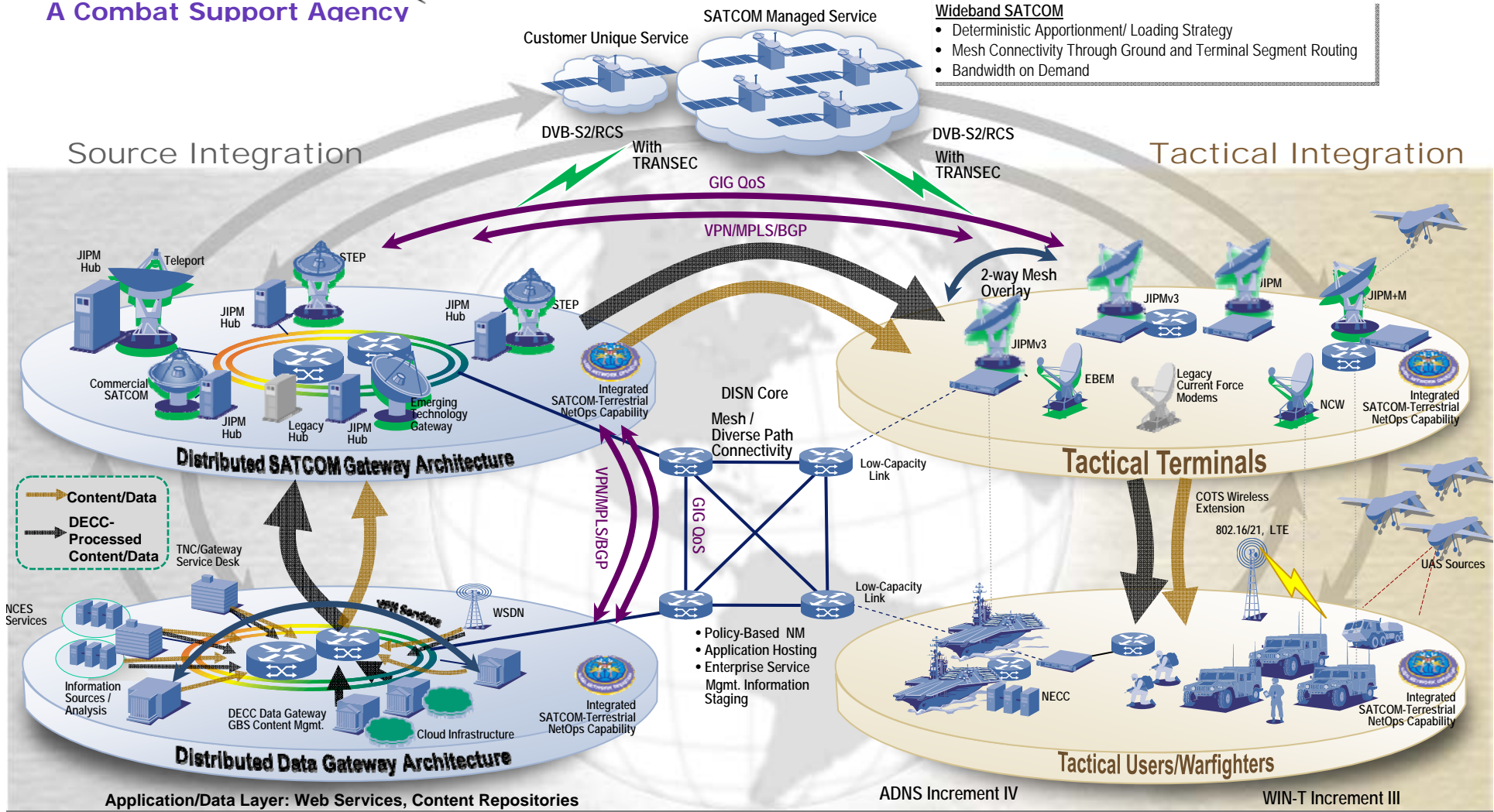


- The GIG provides Warfighters with increased information sharing capabilities over a robust and secure communications infrastructure
- Key enabler for this vision is the migration from legacy stove-piped communications to network-centric (IP-based) communications
- As the primary service provider of the GIG, DISA will interconnect heterogeneous (e.g., fixed, mobile) DoD assets across a “common core”

Goal: Provide the Warfighter with ubiquitous GIG connectivity through high capacity terrestrial and SATCOM links

2016 Vision for Wideband SATCOM

- Wideband SATCOM**
- Deterministic Apportionment/ Loading Strategy
 - Mesh Connectivity Through Ground and Terminal Segment Routing
 - Bandwidth on Demand



Distributed Gateway

JIPM V3/4 at Teleport & STEP sites connected via VPN Mesh provides network diversity

Deterministic Apportionment

Managed WGS & Commercial bandwidth allocations to meet on-demand Warfighter requirements

NetOps

Policy-based network mgmt & situational awareness to meet cyber requirements



Our Programs

SATCOM PMO



DISN whether in the middle of the desert or at sea

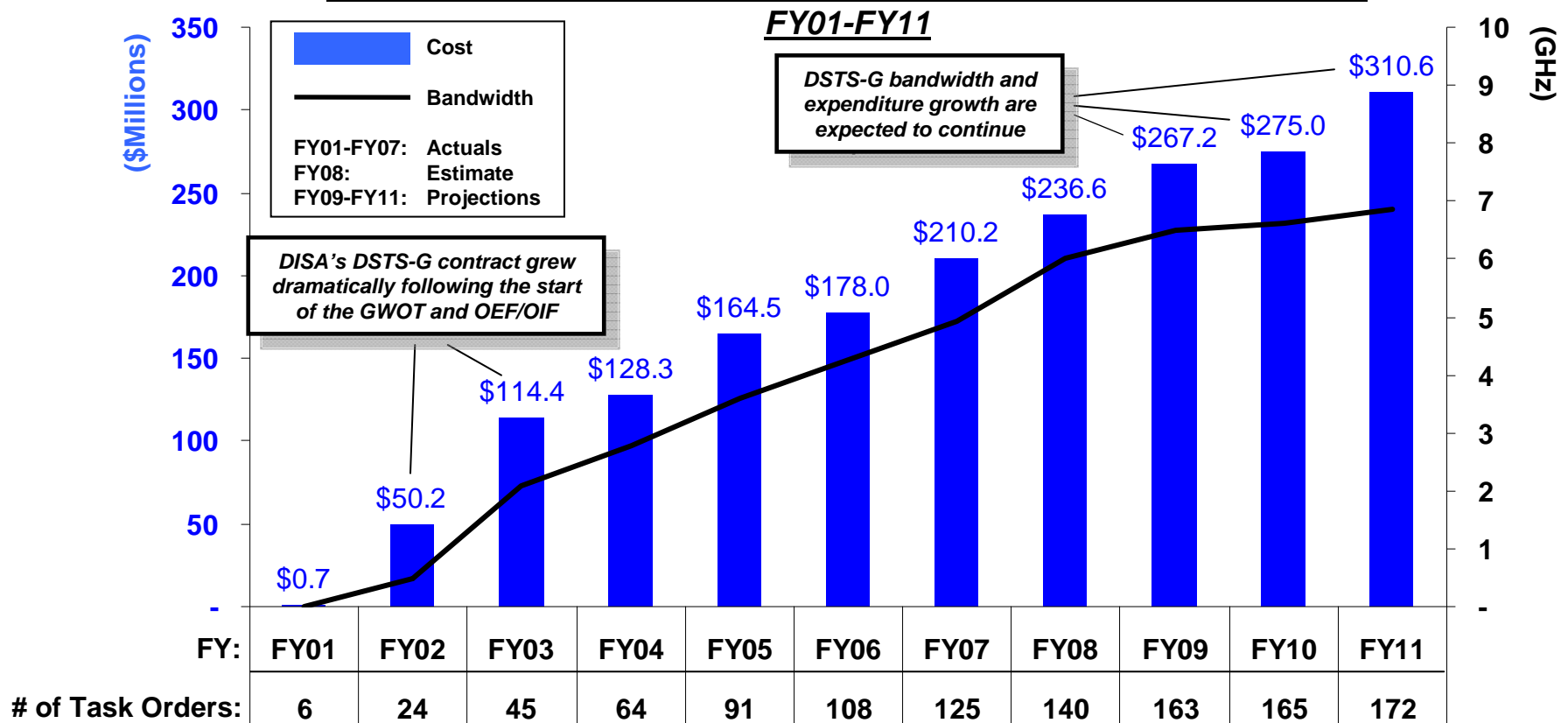
terrestrial customers—using teleports



Commercial SATCOM

- DISA is DoD's only authorized source for COMSATCOM services
- Our responsiveness and cost effectiveness have made us the warfighter's provider of choice!
- DISA projects continued DoD demand for COMSATCOM services

Actual and Projected DSTS-G Costs & Bandwidth – All Task Orders



Commercial SATCOM Initiatives

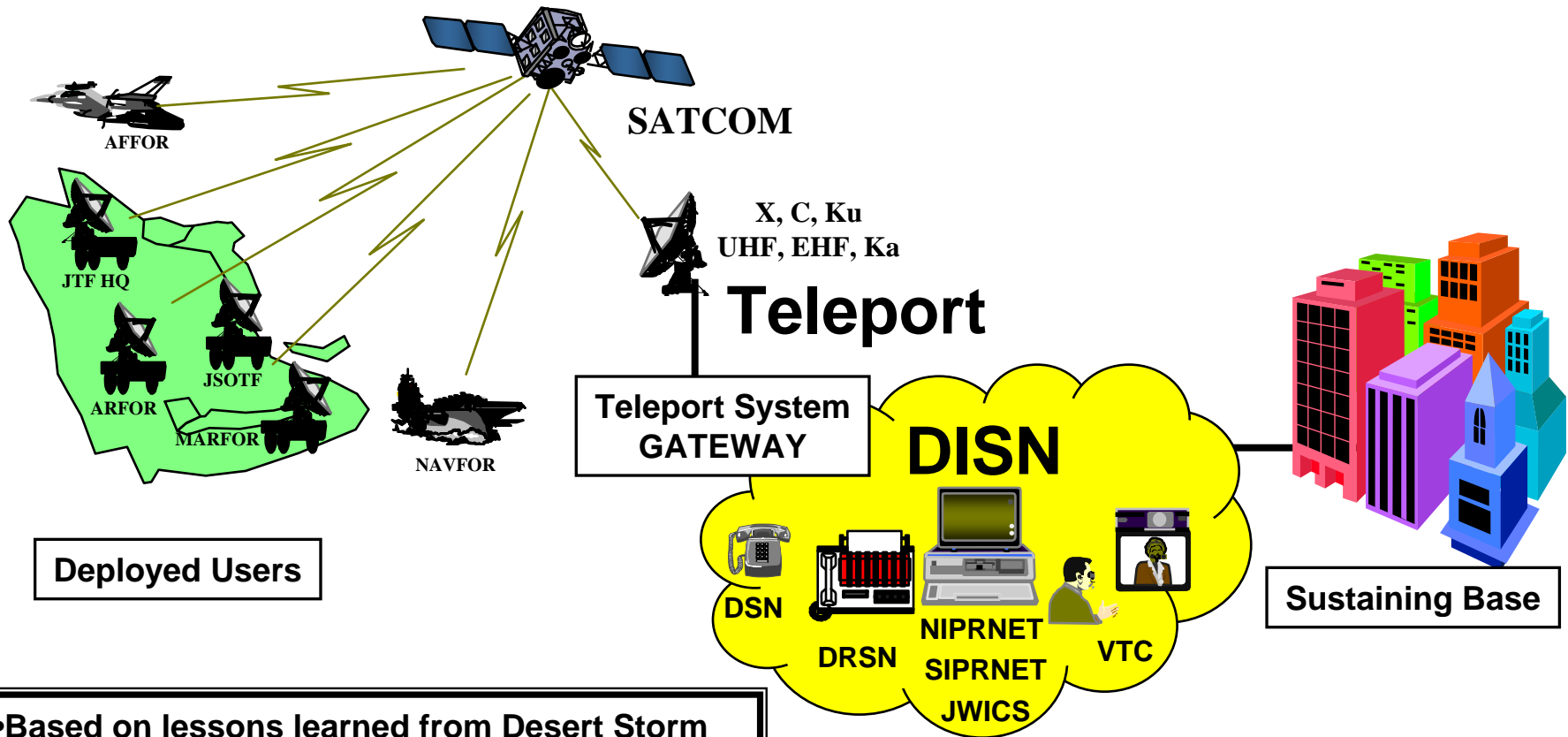
Today...

- Improved business processes – 73% response time reduction
- Streamlined contracting fees – 50% reduction
- Improved customer satisfaction
- Implemented IA protections on DoD leases
- Providing the majority of SATCOM bandwidth for DoD
- Providing 80% of bandwidth to OIF/OEF for the Warfighters

Tomorrow...

- As most COMSATCOM is funded via supplemental dollars, pursue appropriated funding to reduce risk to the warfighter
- Support future DoD COMSATCOM apportionment initiatives
- Facilitate SATCOM technology (e.g., Joint IP Modem) use to improve efficiency and reduce overall cost
- Explore the use all available COMSATCOM services to extend DISN services to the tactical edge

Teleport “In Context”



- Based on lessons learned from Desert Storm
- Upgrade 6 Operational DSCS sites
- Minimum 2 Teleports in View to Warfighter anywhere around the globe

DISN = Defense Information Systems Network
DSCS = Defense Satellite Communication System

Building the Dynamic Gateway for Seamless Communications Support to the Warfighter

Teleport Program Overview

- Provide Critical Support for the Deployed Warfighter
 - Global Information Grid (GIG) Compliant Network Solutions
 - Enhanced Seamless Access to Critical Information Sources
- Provide High Bandwidth, Multiband, Multimode Telecommunications Transport
 - Enhanced Interoperability
- Serve as a Media “Junction” for Space and Terrestrial Information Distribution
 - Cornerstone of GIG Expansion
- Serve as a Technology Insertion Point

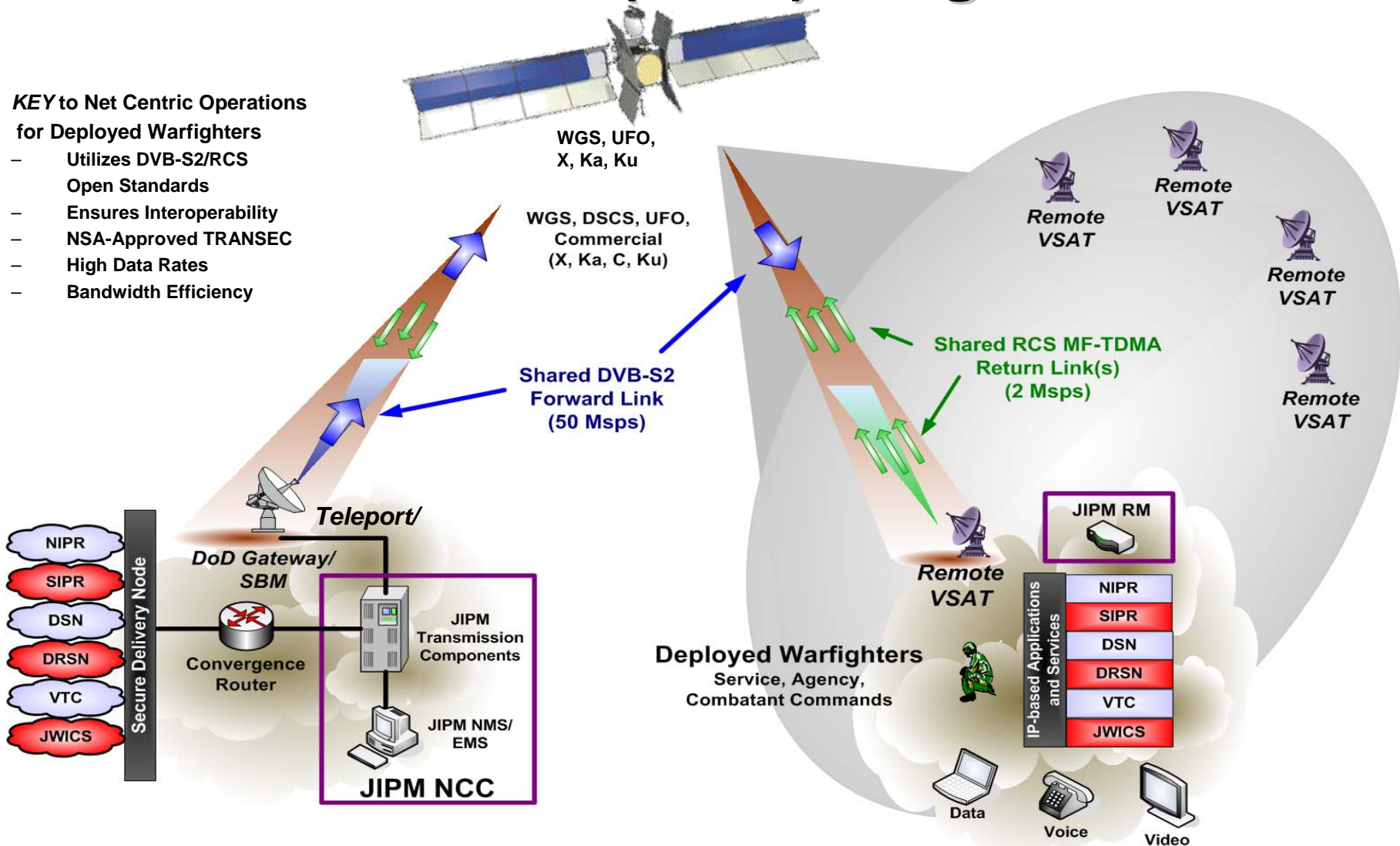


Teleport is the only Broadband Communications Link to the Deployed Warfighter

Joint Internet Protocol Modem (JIPM) Program Overview

KEY to Net Centric Operations for Deployed Warfighters

- Utilizes DVB-S2/RCS Open Standards
- Ensures Interoperability
- NSA-Approved TRANSEC
- High Data Rates
- Bandwidth Efficiency



JIPM Network Control Center (NCC) allows for Global Information Grid (GIG) Connectivity

JIPM Remote Modem (RM) allows for Tactical Local Area Network (LAN) Connectivity

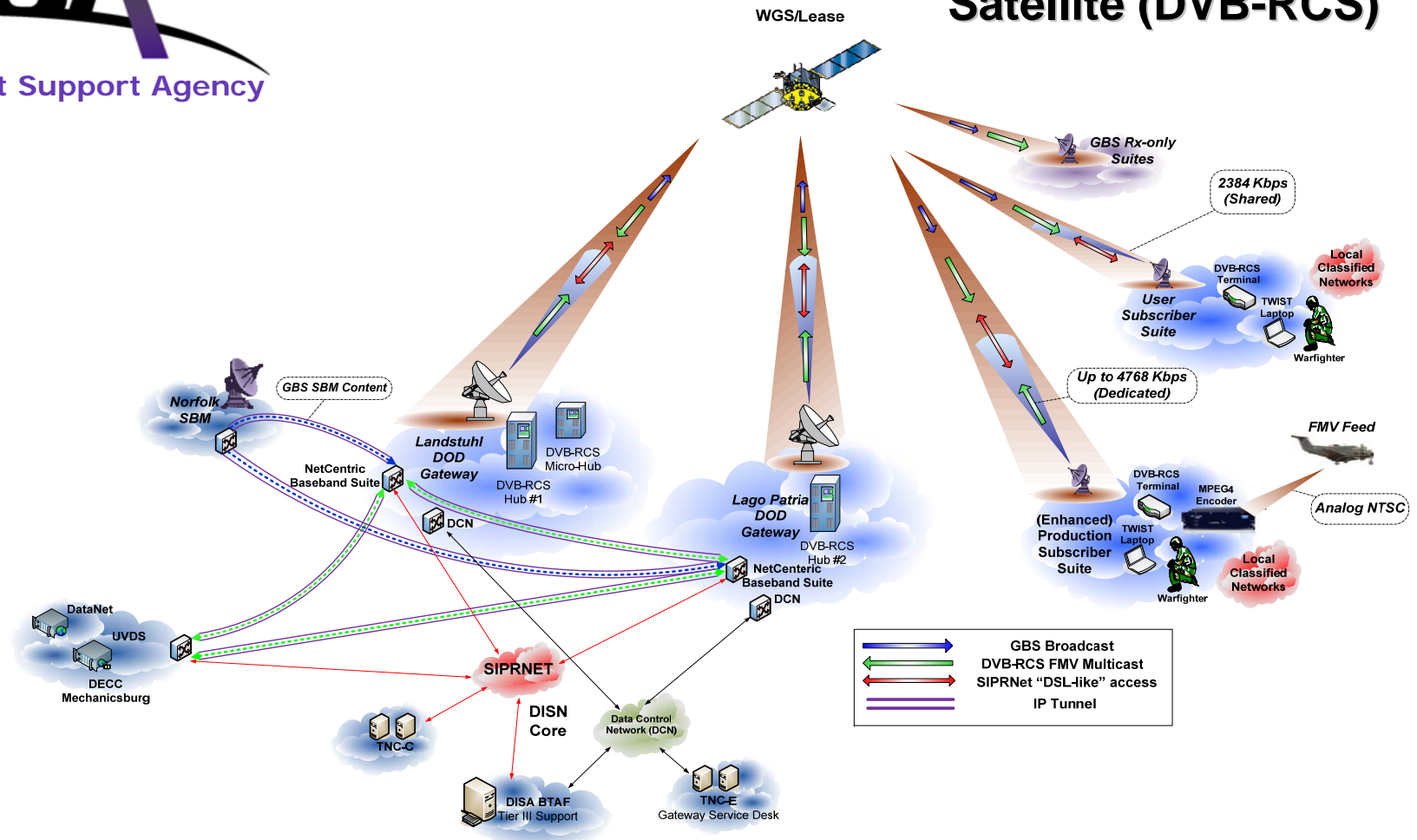


Joint IP Modem (JIPM)

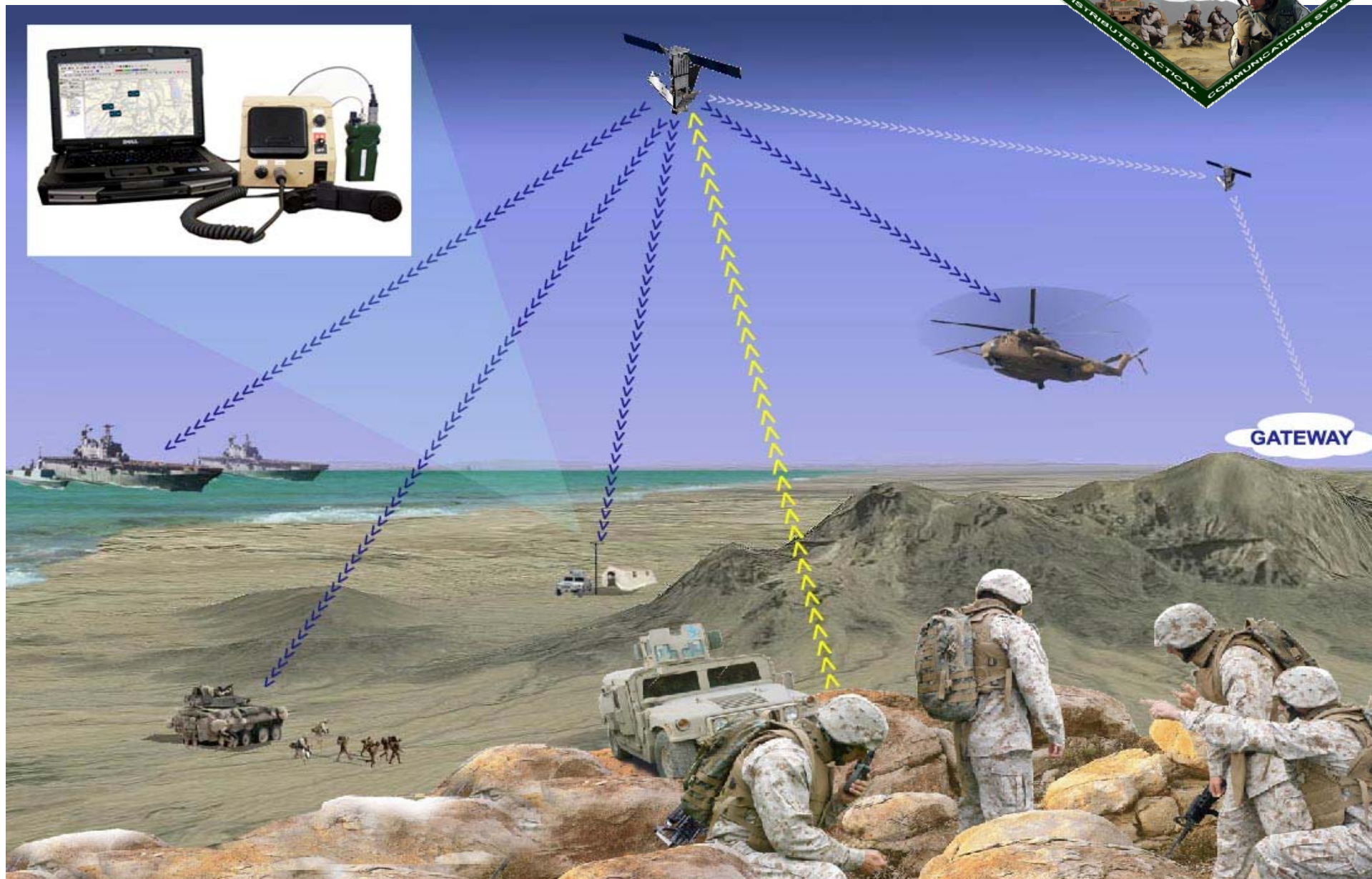
- **JIPM Mission guided by OSD/Networks & Information Integration (NII) policy via DISA**
“To support the Department’s overarching goals to implement a secure means for Transmission of Internet Protocol (IP) over Department Of Defense (DOD)-Leased and DOD-Owned transponded Satellite Communication Systems in support of the war fighter”
- **JIPM supports DOD’s vision for the future consolidation of satellite communications infrastructure**
 - **Cost savings/avoidance from a reduced gateway footprint**
 - **Increased interoperability within the network**
 - **Single technology growth path**
 - **Significantly less infrastructure costs to the individual Services due to investment already being made in the DOD Gateways**
- **JIPM supports Net-Centric Communications via Everything over Internet Protocol (EoIP) and transponded Satellites to Deployed Warfighters, enabling SATCOM to become a TRUE PEER to the Terrestrial GIG.**

JIPM is a mechanism for the Services to attain affordable bandwidth on demand over transponded SATCOM

Digital Video Broadcast – Return Channel Satellite (DVB-RCS)



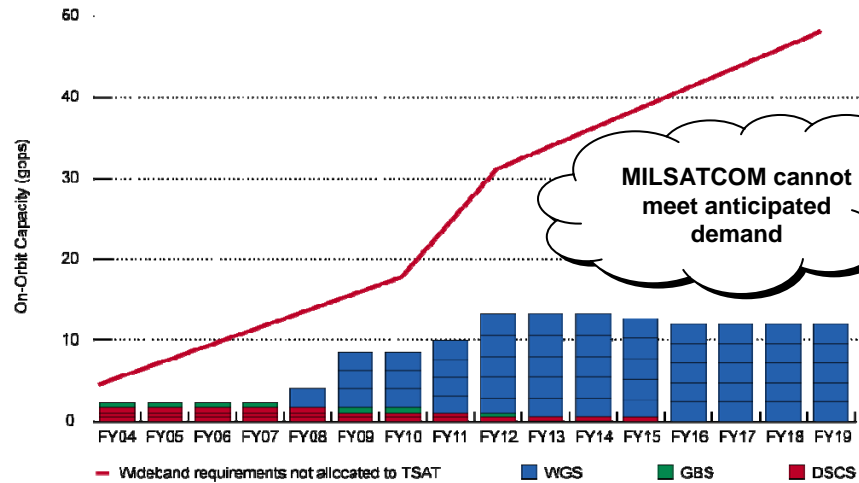
- **Primary Services:**
 - UAV Full Motion Video Broadcast
 - Tactical UAV backhaul
 - GBS Broadcast
- **Secondary Services:**
 - SIPRNET
 - Data File Dissemination
 - Imagery File Dissemination





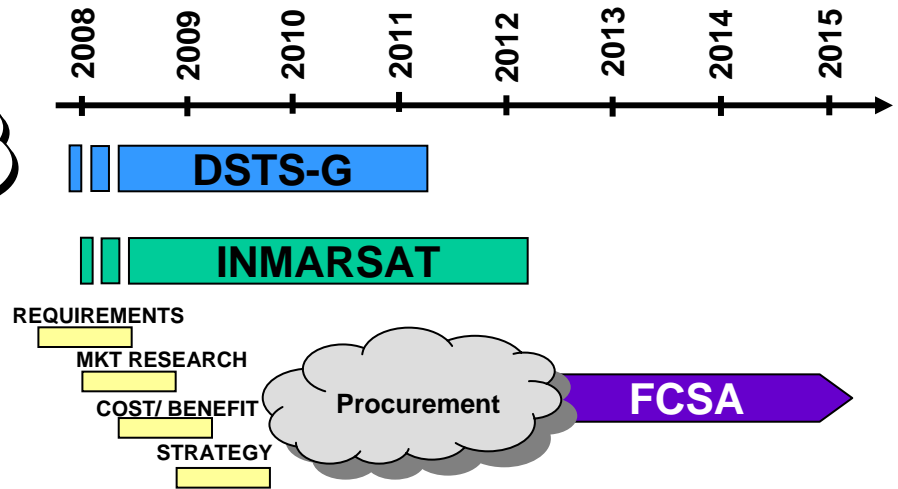
Our Acquisitions

Future COMSATCOM Services Acquisition (FCSA)



DoD's SATCOM usage continues to increase in support of DoD's net-centric approach to warfare

Satellite Service Contracts



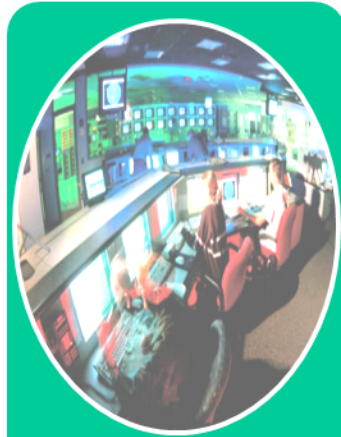
FCSA: Future COMSATCOM Services Acquisition

Objectives

- Satisfy revalidated Joint Staff capabilities
- Provide Warfighters with a flexible, best value, mechanism
- Takes advantage of future industry and user trends

Operational Flexibility is key to meeting the unique and changing needs of military users

GIG Services Management Program Overview



DISN
Operations &
Sustainment



DISN
Engineering,
Transition and
Implementation



Network
Defense

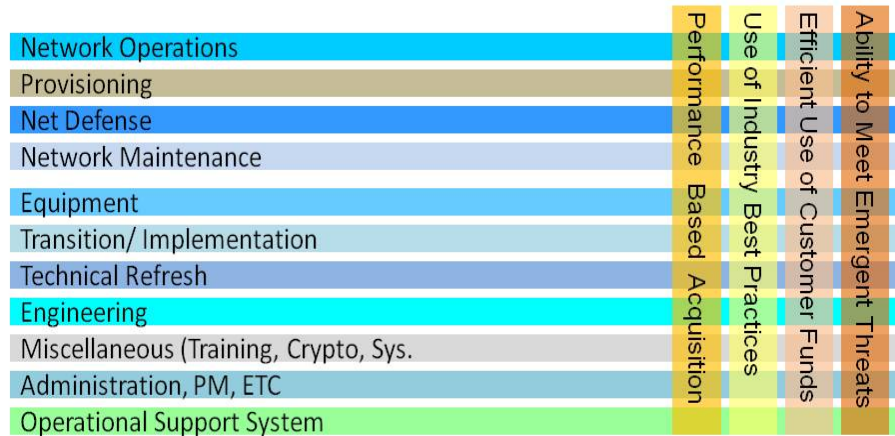


Request
fulfillment &
delivery
(Provisioning)



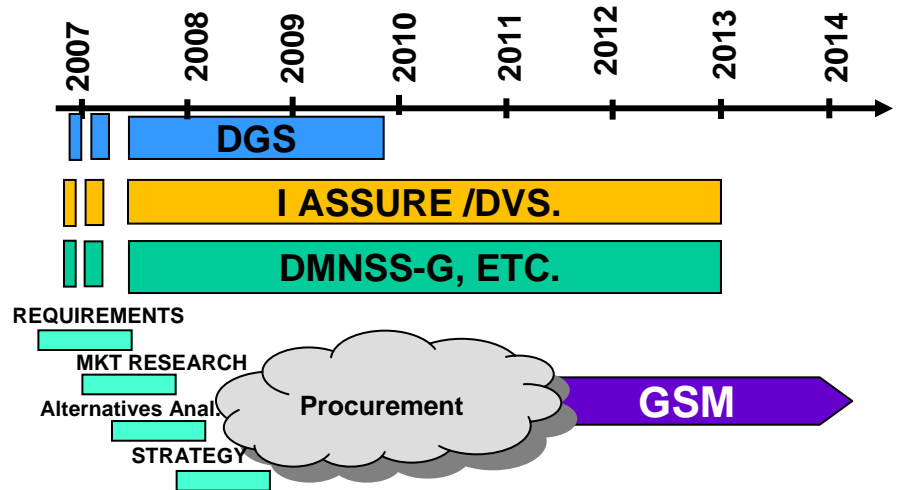
Provides performance based capabilities for all aspects of DISN Support, plus the ability to address convergence of DISA wide operations and network maintenance needs, plus the potential for vendor defined optional DISN services

DISA Future GIG Services Management (GSM) Acquisition of Services



Changing warfighter needs, & emerging technologies continue to challenge DoD's net-centric solutions and support approaches

DISN Support Services Contracts



GSM Acquisition of Services/ Performance Baseline Management

Objectives

- Provide performance based capabilities for all aspects of DISN support
- Provide the ability to address convergence of DISA wide operations & network maintenance needs
- Provide vendor defined optional DISN services such as network capacity on demand

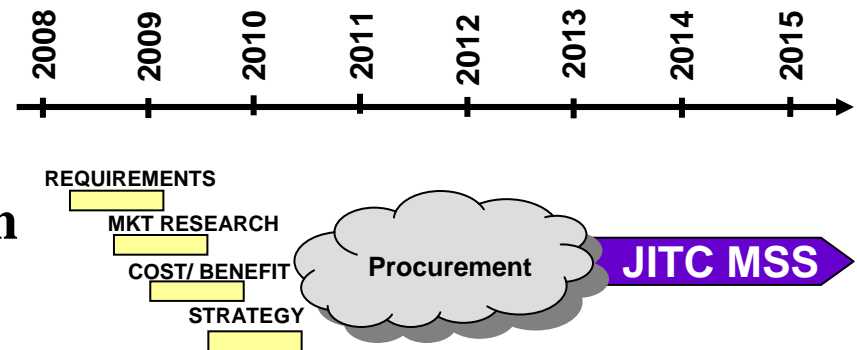
Performance based DISN services support today, flexibility to meet GIG information and communications technology requirements for the next Decade.



Joint Interoperability Test Command (JITC)

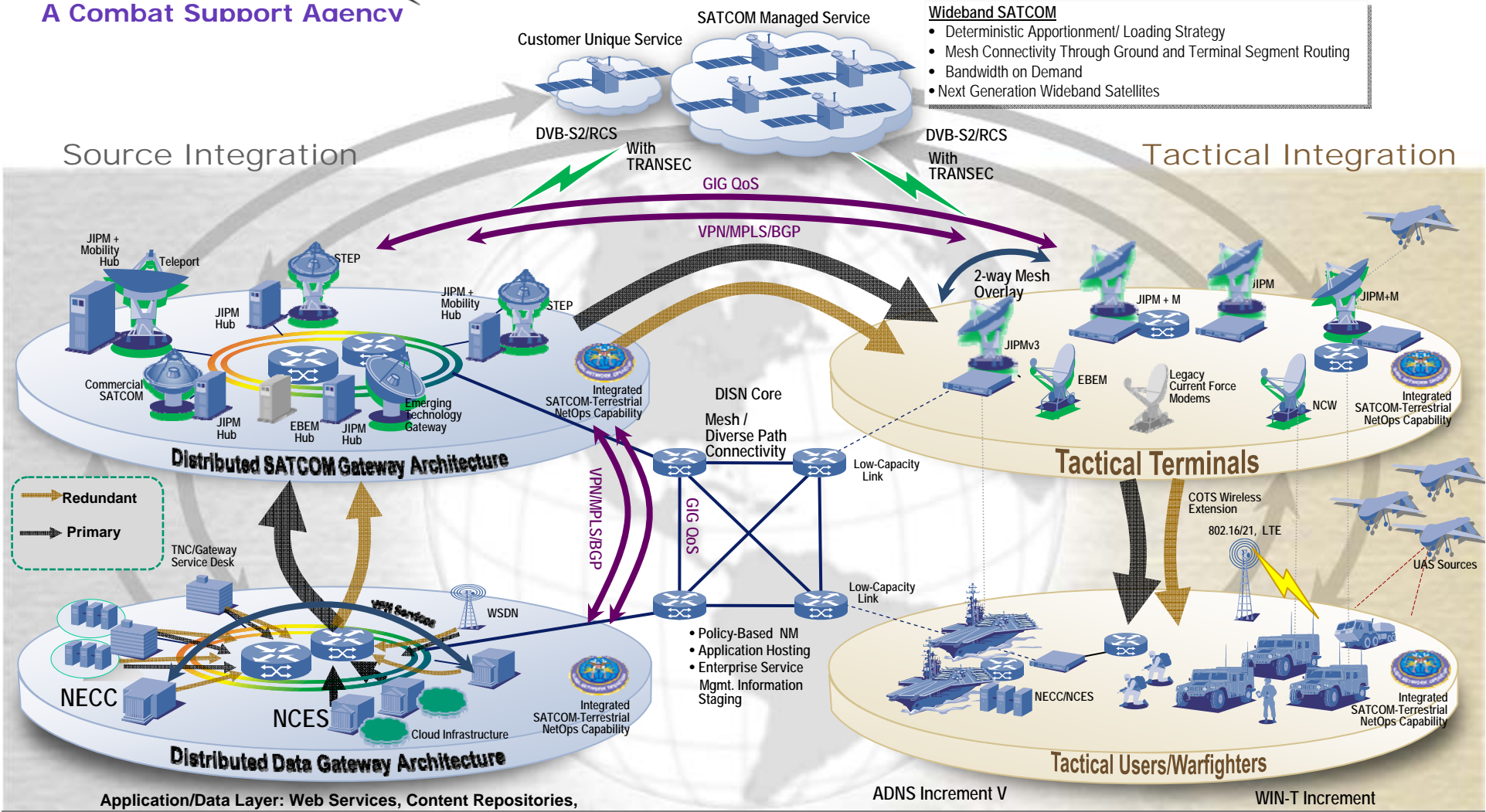
Mission Support Service Contract

- **Mission Statement:** JITC conducts DOD-wide Systems of Systems joint interoperability test, certification, operational testing, and analysis to enhance combat effectiveness and support investment decisions in Warfighting, National Intelligence, and Business mission areas
- **Current Contract Scope:** Supports JITC's mission by performing scientific, engineering, logistic, administrative, acquisition, and ancillary support
- **JITC will continue to require such support - way ahead under investigation**



2020 Vision for Wideband SATCOM

- Wideband SATCOM**
- Deterministic Apportionment/ Loading Strategy
 - Mesh Connectivity Through Ground and Terminal Segment Routing
 - Bandwidth on Demand
 - Next Generation Wideband Satellites



Application/Data Layer: Web Services, Content Repositories, Network Aware Applications

Distributed Gateway

Full convergence of IP operations with Terrestrial Services. Automated Flow routing.

SATCOM Services

Convergence of Narrowband, Wideband, Protected, and Commercial offerings into a dynamic and flexible resource

NetOps

Policy-based network mgmt & situational awareness to meet cyber requirements



www.disa.mil
