



Defense Information Systems Agency
Department of Defense

CUSTOMER CONFERENCE

Lt Gen Charlie Croom
Director, Defense Information Systems Agency
Commander, JTF-GNO
6 May 2008



Combat Support Agency



Global DoD Network
Design, build, provision, sustain
Global Information Grid (GIG)



Combat Support Data Centers
16 in CONUS
one each in Europe and The Pacific



Major Joint Acquisitions Systems
development and support



Force Provider to the
JTF Global Network Operations



Special Missions

➤ **White House Communications Agency (WHCA)**

Provides connectivity for the Commander-in-Chief

➤ **Defense Spectrum Organization (DSO)**

Spectrum management and allocation

➤ **Joint Staff Support Center (JSSC)**

Connectivity for the NMCC & Joint Staff

➤ **Defense Information Technology Contracting Organization (DITCO)**

Contracting for information technology

➤ **Joint Interoperability Test Command (JITC)**

Interoperability testing & certification

➤ **Nuclear Command, Control & Comm (NC3)**

Nuclear weapons management and direction

➤ **Senior Communications**

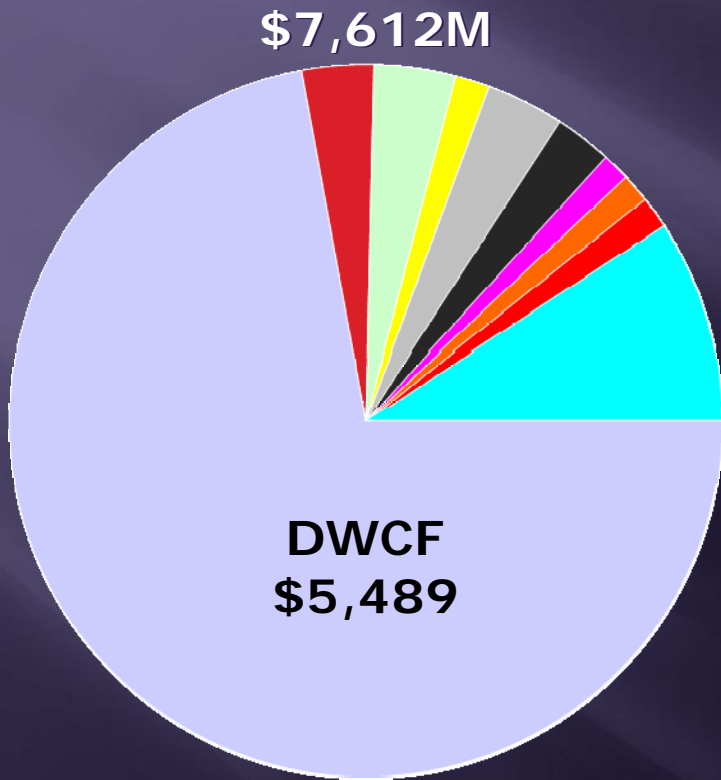
Supports White House, State Dept, Pentagon





FY 2008 Funding

President's Budget 08



- \$5,489M ■ **Defense Working Capital**
 - \$248M ■ **Non-DWCF Reimbursable**
 - \$282M ■ **Civ Pay and Benefits (Appropriated)**
 - \$119M ■ **Facilities and Mission Support**
 - \$269M ■ **BRAC**
 - \$198M ■ **White House**
 - \$96M ■ **National/Nuclear C2**
 - \$100M ■ **Interop Cert/Spectrum**
 - \$110M ■ **Network Operations and COCOM Spt**
 - \$701M ■ **Enterprise Programs**
- Customer Funded**
- Support**
- Specific Missions**

14,600 employees

1700 military

4900 civilian

8000 contractors

80% from Customers

DISA



Information

Enable sharing of information while staunchly protecting it

Power to the Edge

Extend enterprise services to the edge

Operational Excellence

Accelerate operational effectiveness and efficiency

Speed

Deliver IT capabilities and services faster

Best Value

Customers know and understand the value and costs of capabilities and services

DISA

Information



...Our greatest source of military power

...Provide it to our warfighters when and where they need it



Net-Centric Enterprise Services



User Access

DKO Accounts: 1,986,680 (43,025 Joint)
DKO-S Accounts: 90,491 (2,119 Joint)
Unique Logins per Day: 347,868



Metadata Discovery

Metadata Artifacts: >170,000
Total Users Registered: >9,200
Downloads last 90 days: 40,994



Content Discovery

Discoverable Artifacts:
30M SIPR; 3M NIPR
Avg Queries /Day: >37K



Content Delivery

EDGE Nodes: 23 NIPR, 14 SIPR
Content Owners:
6 NIPR (6 sites)
6 SIPR (10 sites)
Site Activity (NGA): >45M objects delivered
since 31 May 07



Collaboration

E-Collab Center (Button 1)
Total Users: 26,240 NIPR / 9,200 SIPR
Largest Session: 300 users
Average Mtgs /Month: 3,400

Defense Connect Online (Button 2)
Total Users: 14,440 NIPR / 6,790 SIPR
Largest Session: 1,350 users
Average Mtgs / Month: 2,480



Messaging

Maritime Domain Awareness
(MDA) COI Pilot:
Pub/Sub Channels: 30
Messages /Week: 80,000



Enterprise Service Management

Services Monitored: 53
Operations Monitored: 177



Service Security

Protecting NCES, MDA COI,
DCGS JEFX Systems



Mediation

MDA COI Pilot (Google Map)
SPAWAR SIL Schema Transform



Service Discovery

Business Entities: 78 NIPR / 77 SIPR
Reg Services: 205 NIPR / 257 SIPR

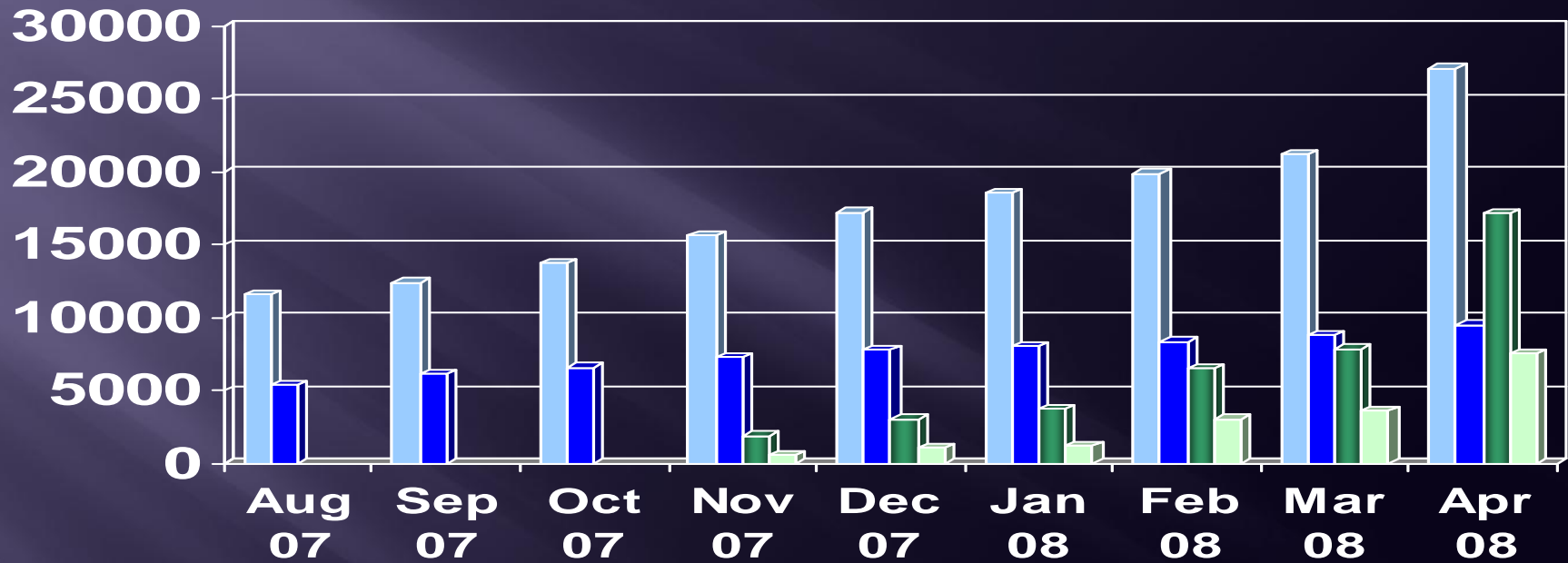


People Discovery

Visits per Month: 1,350
Total Entries: 4M



Collaboration Usage Trends





DKO Communities



*DKO Homepage
on the NIPRNet*



*US Marine Corps
on DKO*



*DKO-S - Classified
on SIPRNET*

Email for Life



*DoD Netops
on DKO*



*DOD Info
Assurance on DKO*



*Joint Knowledge
Online on DKO*

Single sign on

Approaching 2 Million Users!



GIG Content Delivery Service Performance

Without GCDS

With GCDS

68
Seconds

Pentagon to Afghanistan
data transfer

1
Second

85
Seconds

Pentagon to Iraq
data transfer

9
Seconds





Joint Enterprise Directory Services

JEDS

Joint Enterprise Directory Services

[Contact JEDS](#)
[FAQ](#)
[User's Guide](#)

For Official Use Only

Please enter your search criteria below

* Last Name	Exactly Matches	<input type="text"/>
First Name	Exactly Matches	<input type="text"/>
Email	Exactly Matches	<input type="text"/>
DoD	All DoD	<input type="text"/>
Component		<input type="text"/>



New Search

Search Results

Last Name	First Name	Middle Name	Email	State	Component
Smith	Adam	Thomas	adam.t.smith@us.army.mil		USA
Smith	Amanda	Marie	amanda.m.smith@us.army.mil		USA
Smith	Andy	W	andy.w.smith@us.af.mil andy.smith@lackland.af.mil	TX	USAF
Smith	Ben	D	smithbd@mfr.usmc.mil		USMC
Smith	Christopher	J	christopher.smith.109.ctr@us.af.mil chris.smith@nellis.af.mil	NV	CONTRACTOR
Smith	Craig	T	craig.t.smith@us.af.mil craig.smith.18@lackland.af.mil	TX	USAF
Smith	David	Thomas	david.thomas.smith@us.army.mil		USA
Smith	Derek	M	derek.m.smith@us.army.mil		USA
Smith	Kevin	Z	kevin.z.smith@us.af.mil kevin.z.smith@rs.af.mil	TX	USAF
Smith	Mark	X	mark.x.smith@us.army.mil		DFAS

[Click on Last Name to view details](#)

JEDS is Now Available on
NIPRNET and SIPRNET...Use It!

<https://jeds.gds.disa.mil>

<https://jeds.gds.disa.smil/mil>



Maritime Domain Awareness

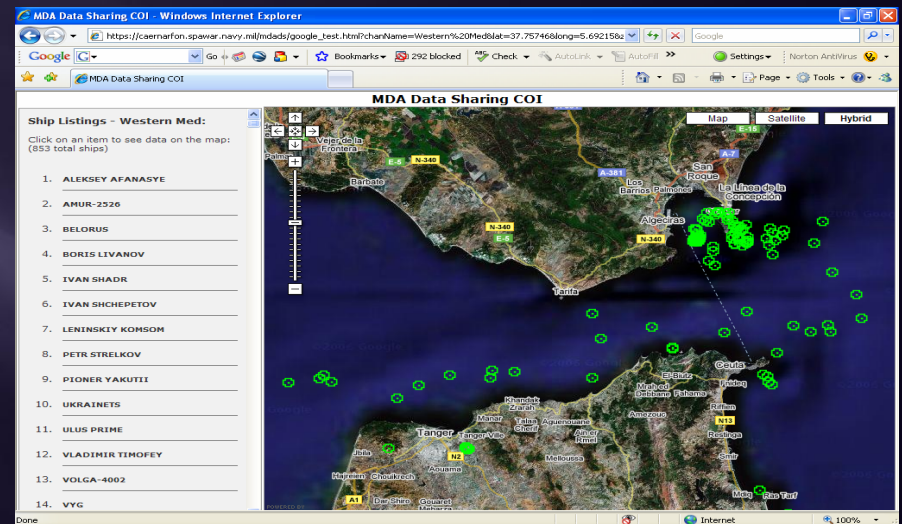
NCES SOAF Services



Real-time Maritime information via enterprise data sources



A capability to share maritime domain awareness across Navy, Coast Guard, and DoT



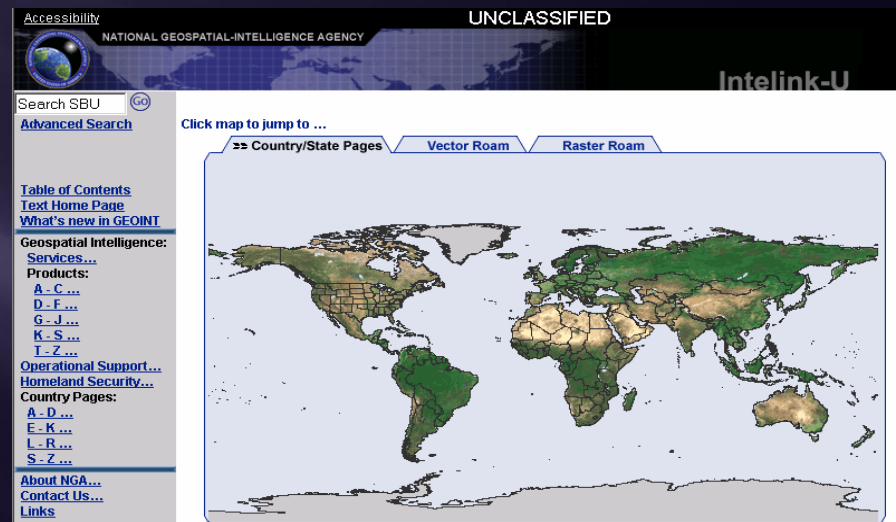


National Geospatial Intelligence Agency

NCES Services



Vast warehouse of
geospatial data



A capability to rapidly disseminate large amounts of geospatial data across the enterprise



Navy Knowledge On-line/ Navy E-Learning

NCES Services

Content
Discovery &
Delivery

Portal

Service
Security



Over 830K global users
across NIPRNET and
NMCI networks



A capability for NKO users to complete course work, with improved end user experience, and faster, more reliable NKO content



Net-Enabled Command Capability (NECC)

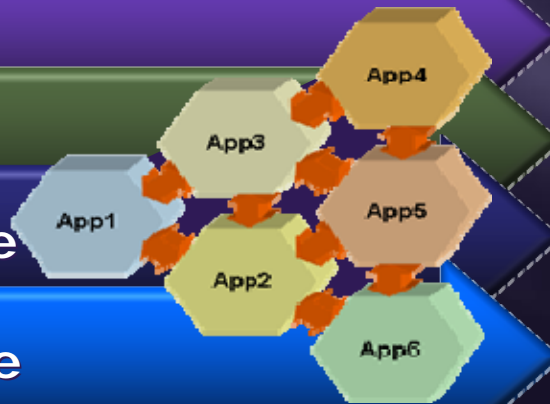
Existing GCCS-Family of Systems -
Tightly Coupled Software
Implementation

GCCS Joint

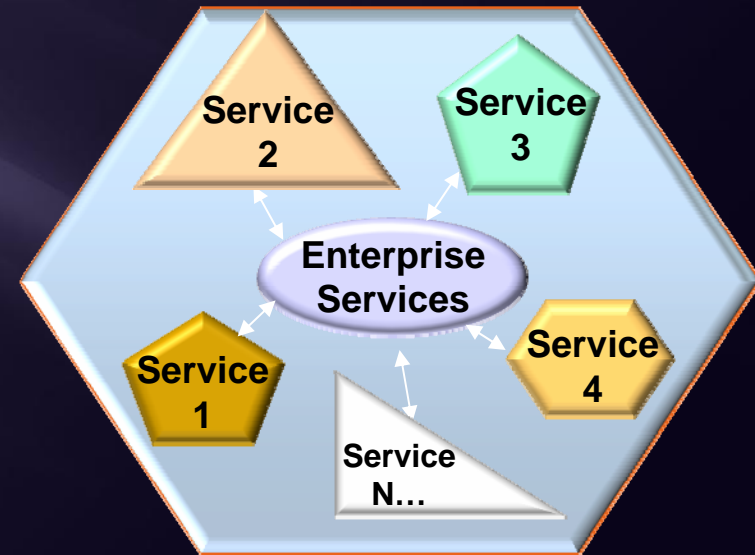
GCCS Army

GCCS Maritime

GCCS Air Force



Loosely Coupled Software
in a Service Oriented
Architecture Environment

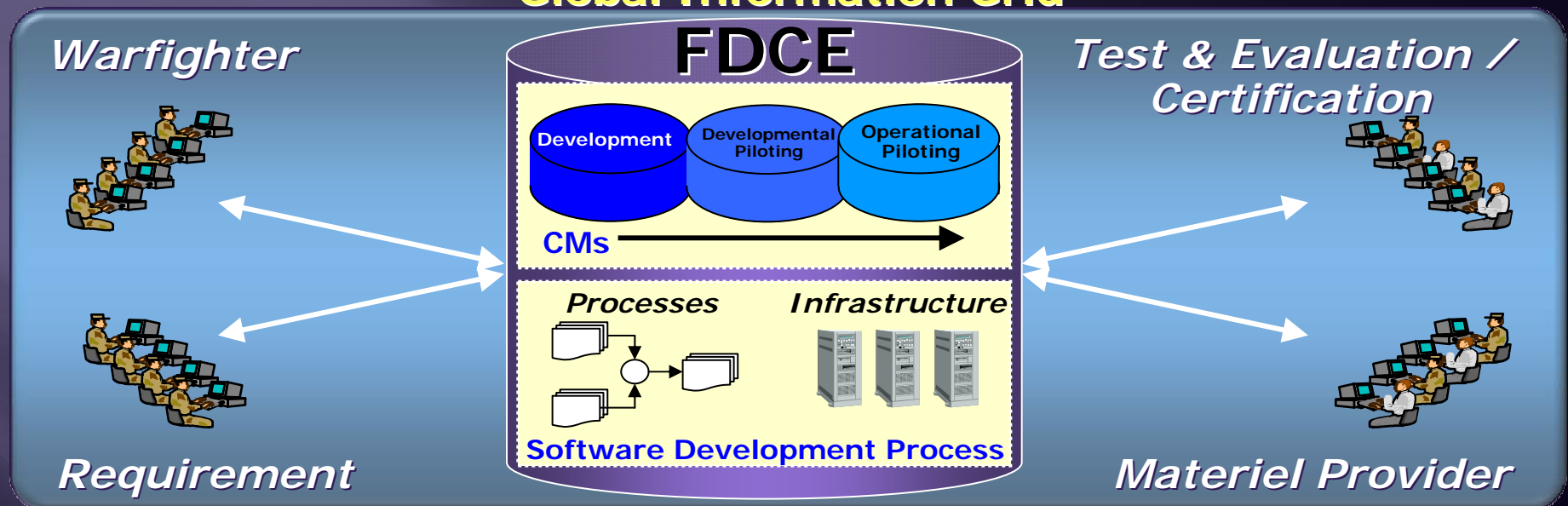


Service Oriented Architecture



The Federated Development & Certification Environment

Global Information Grid



- Enables development, piloting, test, and certification
- Enables Capability Module (CM) maturity
- Warfighter and Tester “test drive”
- Uses commercial tools to automate testing



NECC - First 5 Capability Modules

Situational Awareness

Red Force
Navy

Available
8 May 08

Blue Force
Army

Available
8 May 08

User Defined Operational
Navy



Available 8 May 08

Weather
Air Force

Available
Now

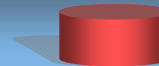
Association Management
Navy

Available
8 May 08

**Leveraging
NCES Services:**



Service
Discovery



Metadata
Registry



Content
Discovery &
Delivery



Network Improvement Tiger Team

➤ **Redesign the NIPR/SIPR**

- Security
- Performance
- Information sharing

➤ **Products:**

- Quick wins (complete)
- Mid-term/POM-10 (complete)
 - "Always-on network", "Future end-user device", "Enable sharing"
- Blue Sky (30 June)
 - Fundamentally change the way we do business
 - "IT performs to mission need", "Reduced attack surface", "Network IFF", "IT engineered for change"

DISA

Power to the Edge



...Extending capabilities to the tactical edge
...SATCOM – the ultimate team sport



Secure Mobile Environment Portable Electronic Device (SME-PED)

Capabilities

- Voice (up to top-secret)
- E-mail (up to secret)
- Web browsing (up to secret)
- SCIF mode ability
- CAC Reader

When & How

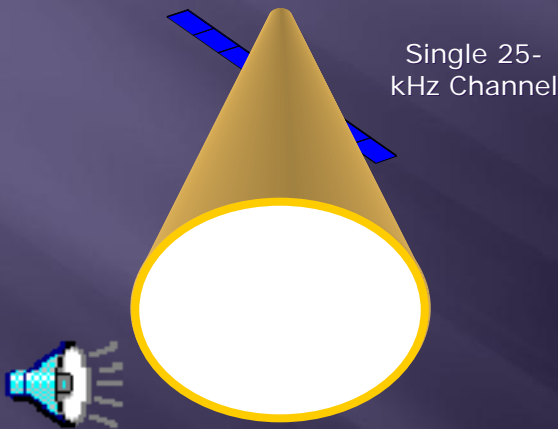
- MCEP centrally funded
- User pays for device/air time
- IOC now at SOUTHCOM
- Jul 08 – 500 devices across DoD for further ops & testing





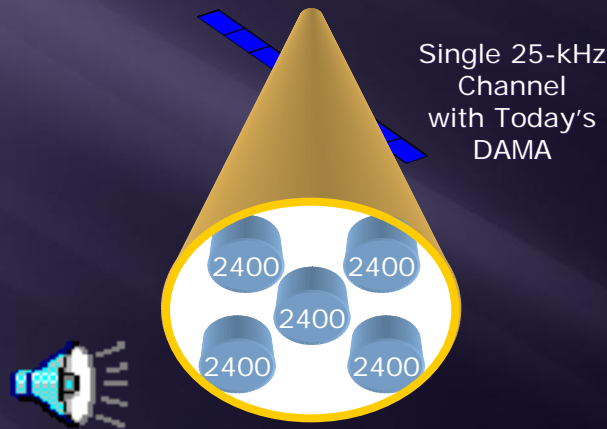
Integrated Waveform Demonstration

Dedicated Channel



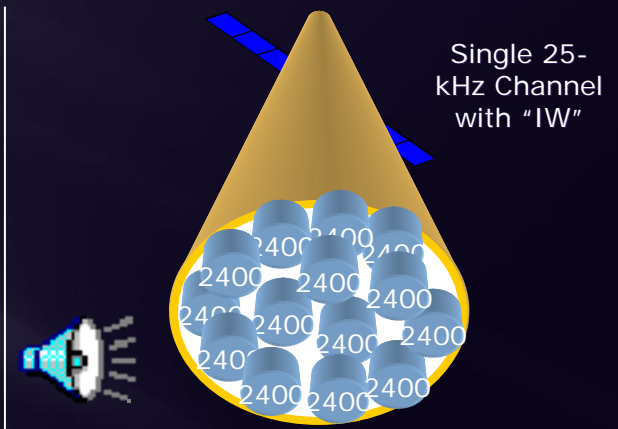
A 25kHz channel typically supports one non-DAMA network

Demand-Assigned, Multiple Access (DAMA)



A 25-kHz DAMA Channel supports up to 5 simultaneous 2.4k Voice networks

Integrated Waveform (IW)



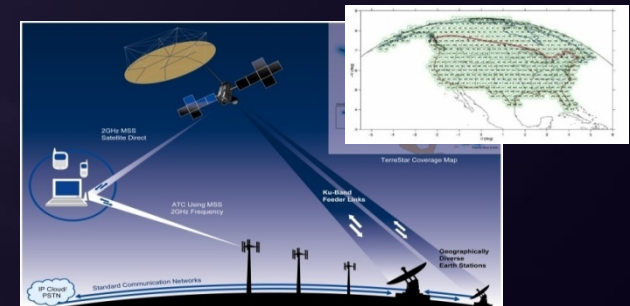
A 25-kHz IW Channel supports average of 14 simultaneous 2.4k Voice networks

Software distribution by Sep 08



Cooperative Research And Development Agreement

- Cellular system switches to SATCOM when local cells unavailable
- 4G All IP system
- Prioritized USG and first responder access with preemption ability
- Reliable – day-to-day and crisis situation usage
- Highly available anywhere in satellite footprint



Improved Situational Awareness

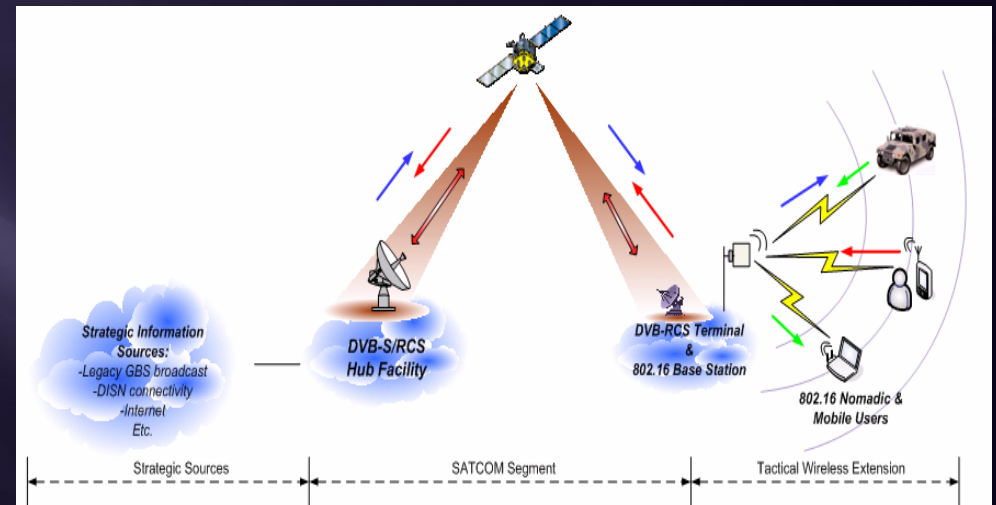
- On-the-fly, point-and-click group assignment
 - "Push-to-talk" conference call grouping
 - Video distribution

- Satellite Launch in Dec 2008
- System IOC in Spring 2009



Tactical Service Provider JCTD

- Integrates WiMax (802.16e) with SATCOM VSAT for rapid deployment of broadband to handheld device capability
- Allows for true End-to-End performance by utilizing QoS, Flow-Control, Data Signaling to maximize throughput
- Can be added to augment any IP Connection Point



- **15 MB/Sec per channel**
 - 4 channels/ suite
- **Consists of a single 3-Rack Unit Case with 25 foot crank-up Mast Antenna for 5-10 KM, 120 degree coverage**



Net-Centric Spectrum Management Vision

- **Counter IED**
- **100 weapons platform studies**
 - Predator, A-10, Common Data Link, E-4B, Missile Defense Agency radars and interceptors
- **CENTCOM coordinates 150,351 frequencies**
 - 20,722 in Iraq
 - 12,589 in Afghanistan
 - 1,186 in Horn of Africa
 - 71,732 ITU space
 - balance in remaining AOR and host nation civil



Crisis Management System (CMS)

-- The President's Link to the World

- NSC - owned & mandated secure voice, video, fax system for national level decision makers
- President's hands-on system of choice for day-to-day and crisis management
- One of a kind, state of the art – projects the President crystal clear anywhere, any time
- Latest success: Expansion of CMS to SLC3S Aircraft, California Wildfire Virtual Cabinet Meeting, Creation of Virtual Situation Room, Expansion of Head of State Communications.





Senior Leadership C3 System (SLC3S)



- Comm. system engineering supporting the POTUS, VPOTUS, SECDEF, CJCS, SECSTATE, DHS, DNI and other users of the Special Air Mission fleet
- Recent successes
 - E-4 (NAOC) AoA
 - SLC3S Wideband AoA
 - WGS Validation Testing
 - Phoenix Network development
 - SLC3S Teleport Pilot



Senior Leadership Communications Customers

Department of Homeland Security (V)

4 Links

Canada
Mexico
UK
Russia (Planned)
Israel (Planned)

Military & Regional Links Secure Voice/Data

SACEUR
CENTCOM
PACOM
EUCOM
NORAD (Planned)

Shared Early Warning:

JDEC-Russia (TBD)
(Classified Links)

White House Links 20 Links

Russia-Secure Voice and Data
Other Nations
Classified Voice, Video and Data Links

WASHINGTON

STATE DEPT

FOREIGN AFFAIR LINKS

12 Links
(Secure Voice)
Tokyo
China
Mexico City
Berlin
Israel
United Kingdom
France
E.U.
Government Links
(Secure Data)
Russia
Belarus
Kazakhstan
Ukraine

SECDEF

Defense Telephone Link (Secure voice)
49 Links (33 SECDEF, 16 COCOMS)

Albania	Ukraine	Bahrain
Oman	Bulgaria	Israel
Qatar	Kuwait	U.A.E.
Latvia	Estonia	Poland
Lithuania	Slovakia	Romania
Slovenia	Kazakhstan	Czech Republic
Saudi Arabia	Macedonia	Austria
NATO	Spain	Portugal
Germany	France	Italy
United Kingdom		South Korea

- 85 links in 57 nations
- 1445 official voice and data exchanges CY 07
- 99+% reliability

DISA

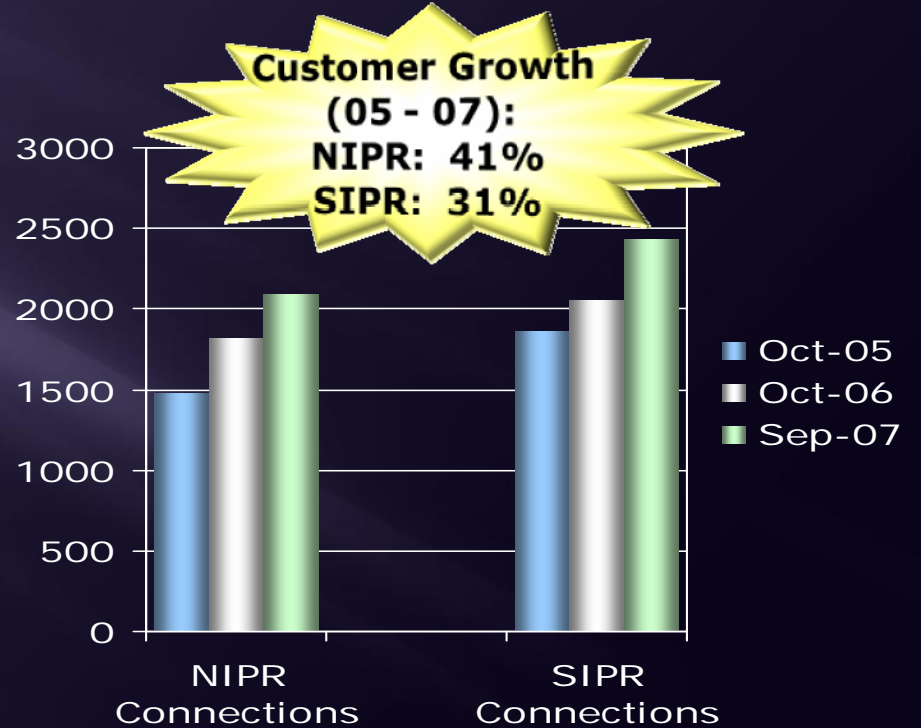
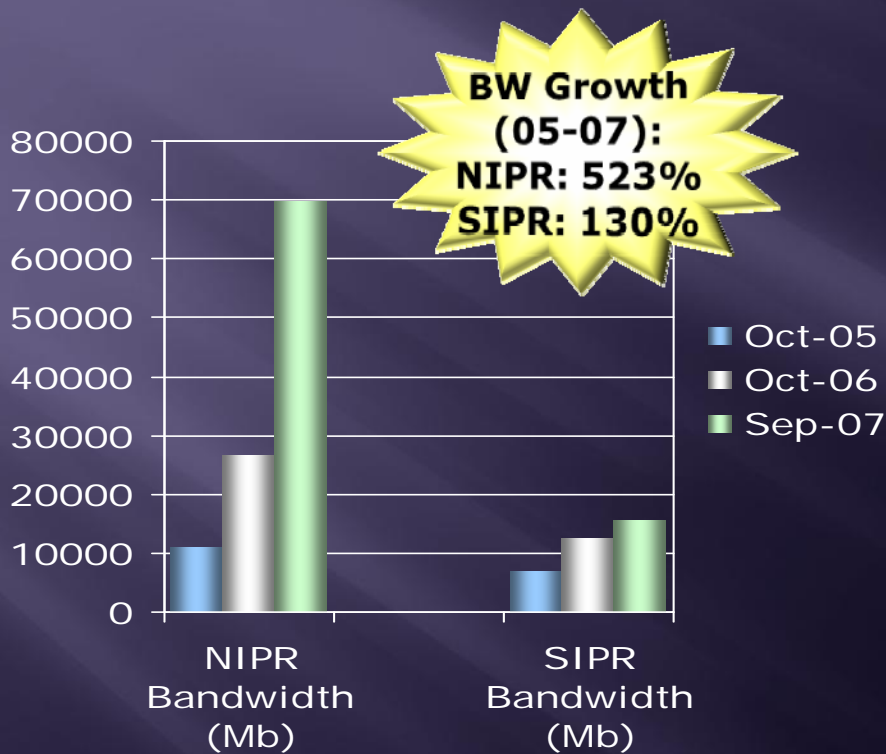
Operational Excellence



**...Operate effectively, lower costs, measure quality of service
...agility to adjust to dynamic requirements**



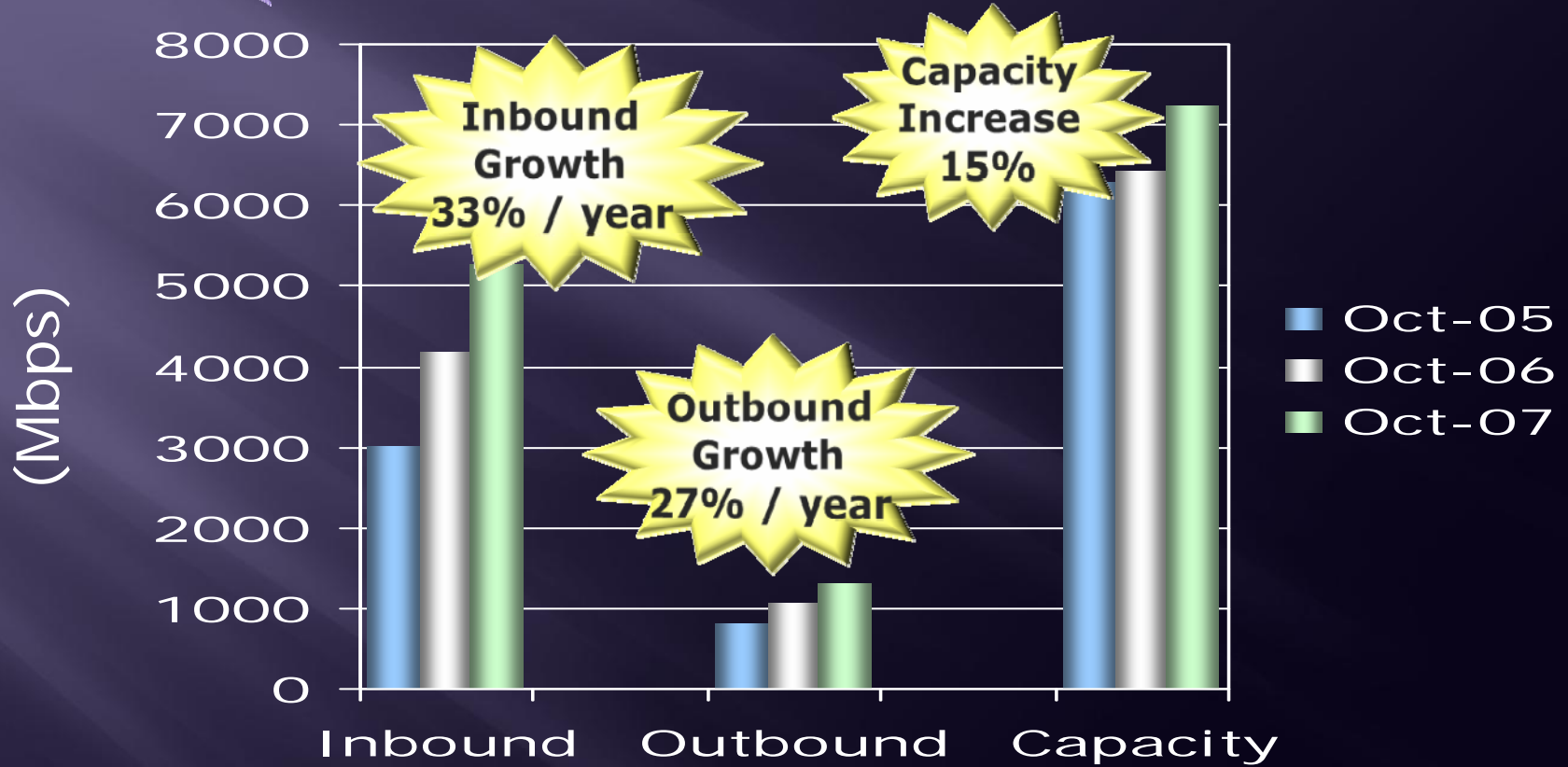
NIPRNet/SIPRNet Growth



Exponential Growth !



Internet Traffic



Threats Increase with Traffic



DISA Global Reach

Responsive/Protected/Robust/Efficient

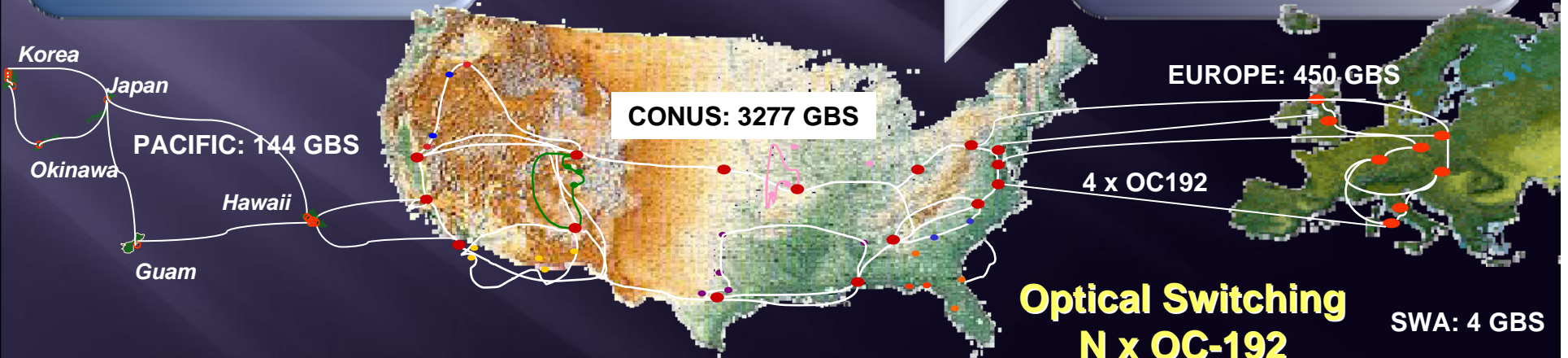
FEB 05

**480
GBS**

**OVER 8X
TOTAL CAPACITY**

DEC 07

**3875
GBS**

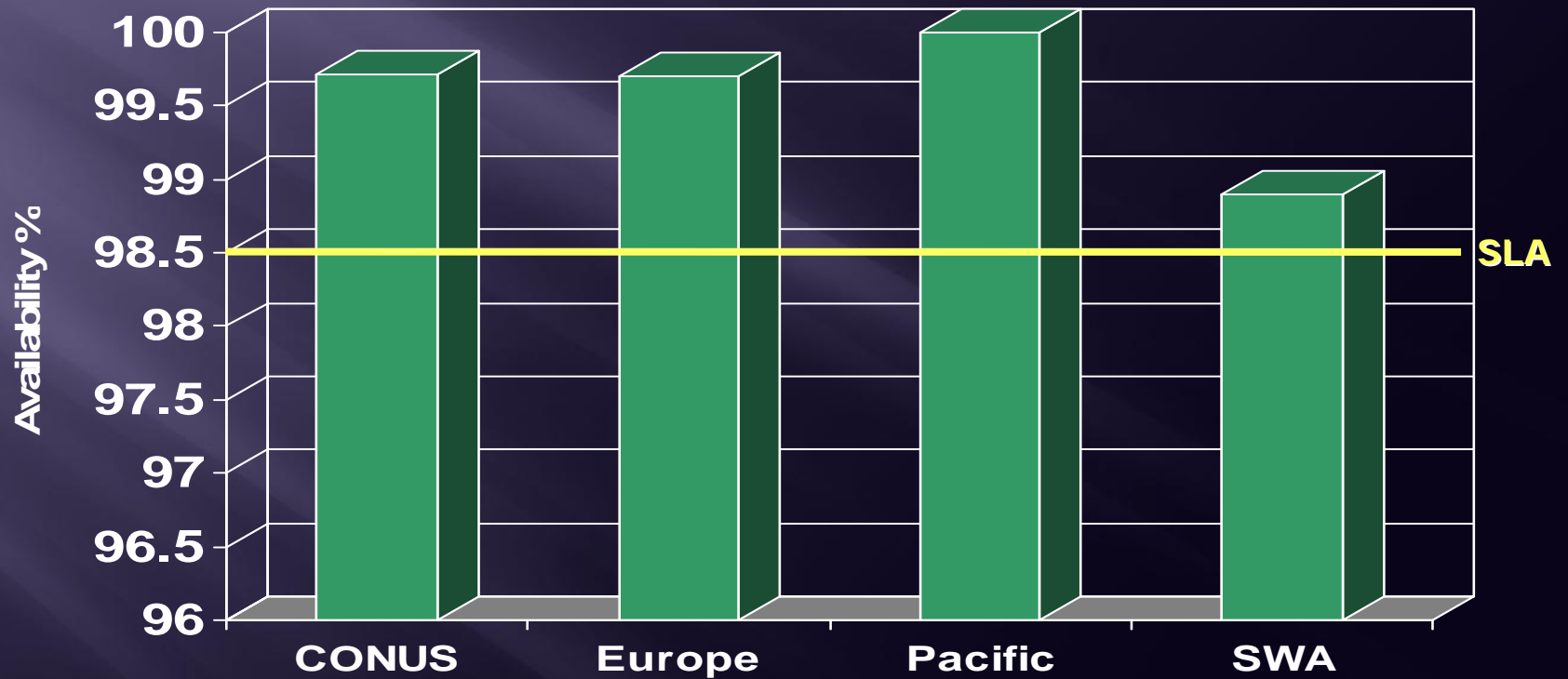


Posturing GIG to Support Net Centric Operations Warfare



SIPRNet Performance Metrics

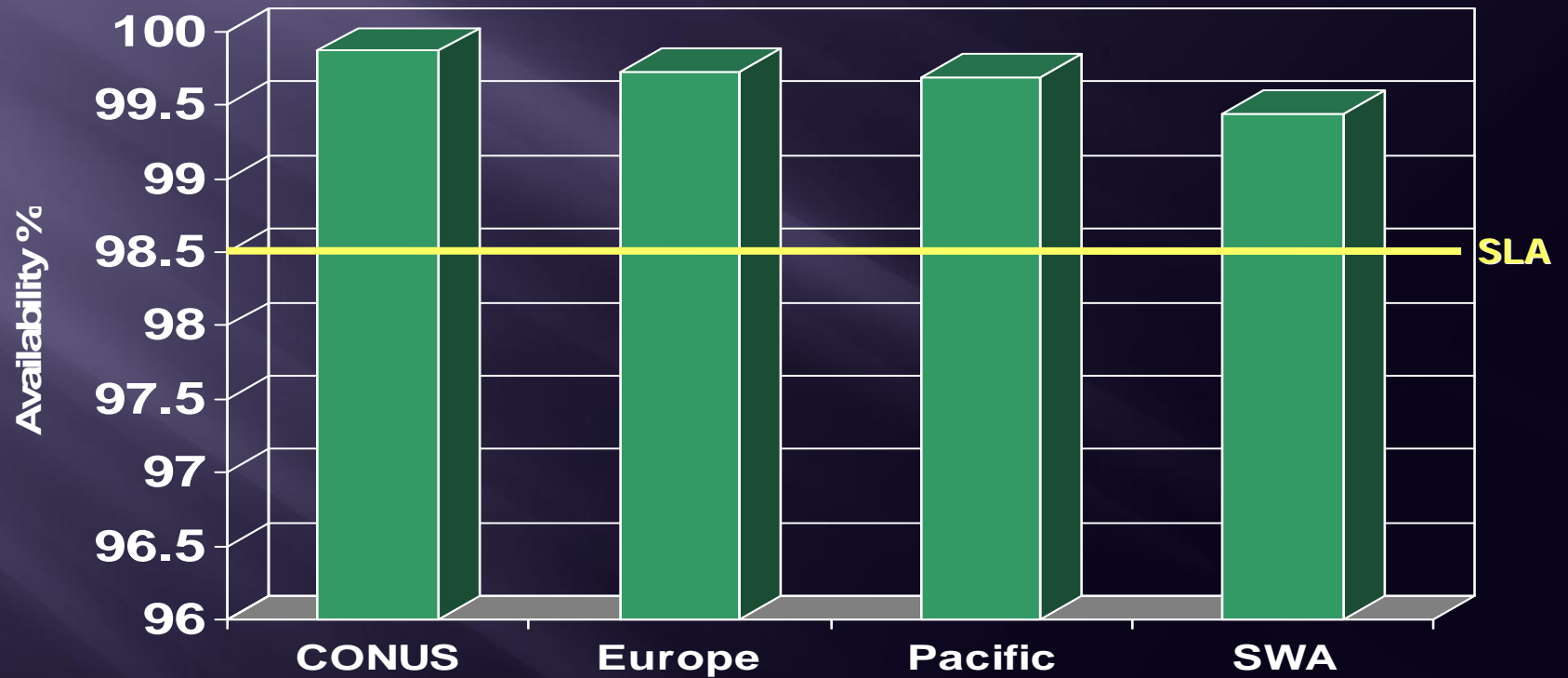
SIPRNET Availability (February 2008)





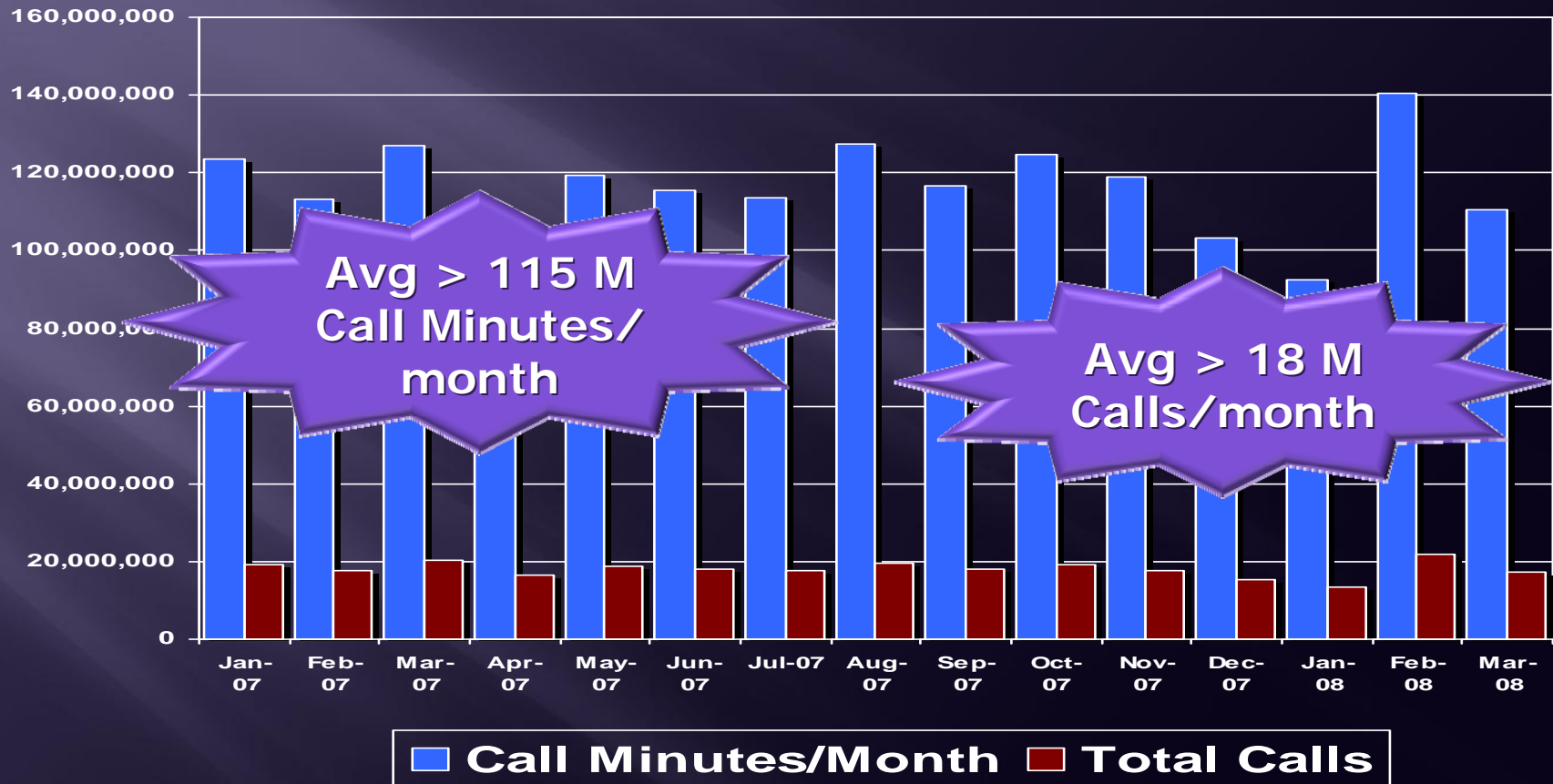
NIPRNet Performance Metrics

NIPRNet Availability (February 2008)



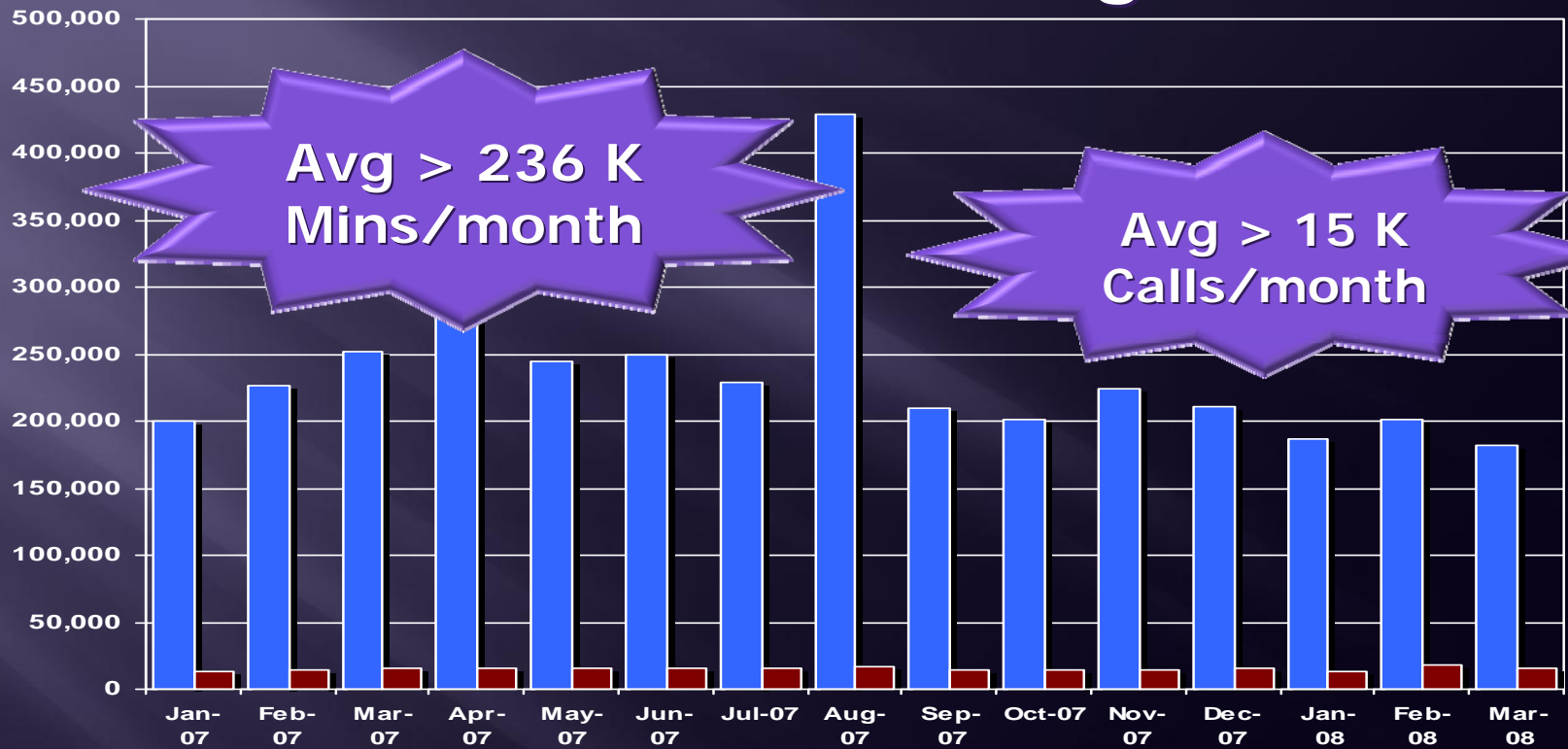


DSN Calls/Minutes Trending





DSN Precedence Calls/Minutes Trending



■ Precedence Minutes/Month ■ Total Precedence Calls



Computing for the Warfighter

- **Services**

- Mainframe, client server, web services
- Storage

- **5 million-plus users**

- Military Services
- Defense Agencies
- Combatant Commands
- 1,400 applications

- **With**

- 18 DECCs
- 45 mainframes
- 6,000+ servers



finance



command & control



medical care



manage parts & replenish supplies



provision ships



manage maintenance

Capacity & Storage on Demand

- Acquire as a managed service
- Pay only for what we use



Large Diverse Enterprises

Defense Logistics Agency

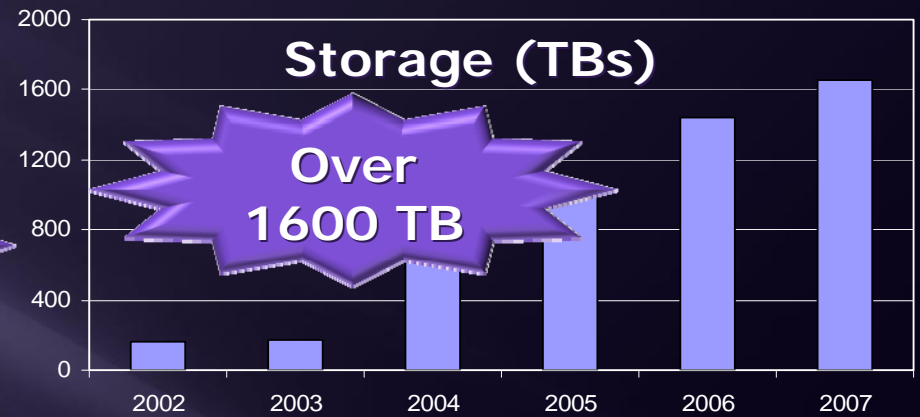
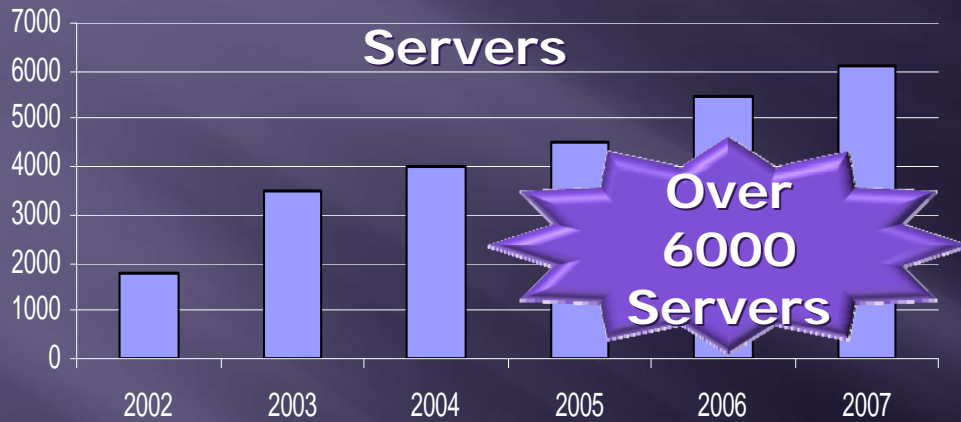
- 5.2M items managed
- 54,000 requisitions / day
- 8,200 contracts awarded / day
- \$35.5B sales / services FY06
- 1, 312 weapons systems supported
- \$94.1B inventory
- Comparable to #58 on the Fortune 500 (Sprint Nextel)

Defense Finance and Accounting Service

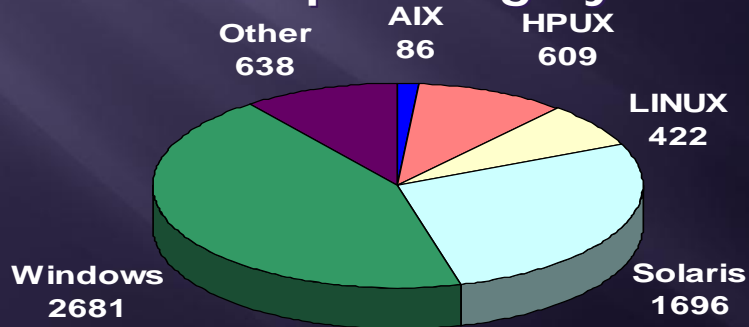
- 5.9M people paid
- 13.8M invoices
- 7M travel payments
- \$424B in pay disbursements
- 57M accounting transactions
- \$255B military retirement and health benefits managed
- \$20.9B in foreign military sales



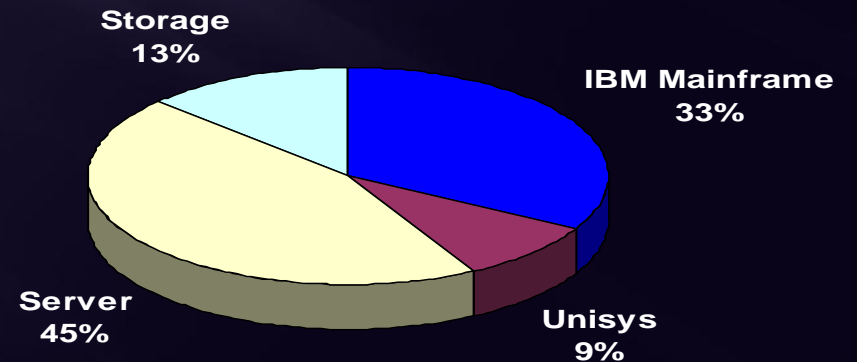
Computing Landscape



Server Operating Systems



Lines of Business





WHCA Operational Statistics

2007	2008	
211	101	Presidential missions
131	53	Vice Presidential missions
70	23	First Lady missions
55	40	Operational support missions
36,799	18,569	Days WHCA members traveled
1,227,650	754,000	Miles traveled in support of Presidential missions
4,298,000	2,513,000	Lbs of equipment transported in support of Presidential missions
380	175	Presidential / Vice Presidential / Senior Staff Secure Calls completed
268	276	Presidential / Vice Presidential / Senior Staff Non-secure Calls completed
181	138	Communicators trained to support Presidential Travel



Nuclear C3

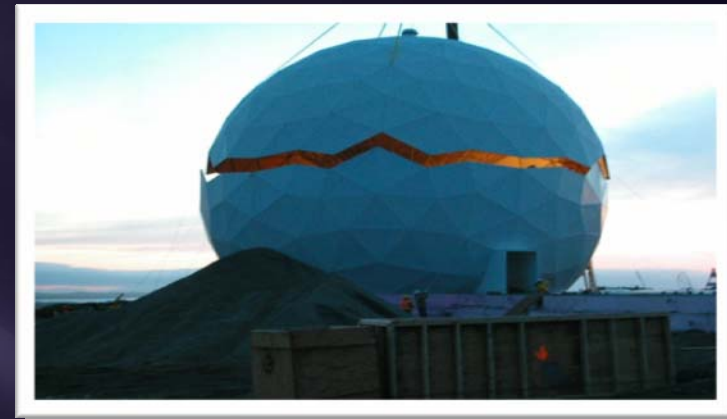
The Nuclear C3 System Engineer Mission



- Develop
 - Architecture designs,
 - Performance and threat analyses,
 - Engineering, programmatic & directive documents
- Perform Operational assessments – *Polo Hat*
- Certify Emergency Action Message (EAM) System
- Develop Operational comm plans - *CJCS Emergency Action Procedures*



Missile Defense Communications



- On-site project office support at Missile Defense Agency
- Provide Specialized HEMP hardening engineering
- Procure satellite ground terminals and equipment
- Expanding DISN to accommodate MDA bandwidth at over 24 global locations

DISA

Speed



...Deliver the 80% solution ... then improve rapidly
...Tailor governance and oversight to risk



Acquisition Approach

- **ABC principle – adopt before buy, buy before create**
 - Army Knowledge Online as the enterprise portal
 - Use of Army's ITES-2 contract for the core NCES element
 - NCES collaboration tool as a commercially managed service
 - DNI's search engine for NCES
 - Air Force's Akamai solution for content staging
- **Creative competition**
 - Collaboration two-button approach – vendors paid by use
- **Speed**
 - "Sandbox" – users, developers, testers, certifiers in parallel
 - Awarded managed services for processing and storage capacity
 - Turn capacity on/off without procurement lead time
 - Utility pricing – pay only for what's consumed
- **Minimize size of requirements documents**

Think big, build small, scale appropriately



Capacity & Storage on Demand

Acquire as a service provided by vendor

160 Orders Completed

- \$28.1M annualized value
- 44% IBM mainframe MIPS replaced
- Over 450 OEs replaced
- Realized cost avoidance ~ \$6M

Average Delivery Timeline - 14 Days

- 20 days for mainframe
- 12 days for server
- 20 orders took < 5 days
- 53 orders took 5-14 days



Pay only for what we use!



AHLTA Tech Refresh

Annual Hosting Cost



Savings: \$11.6 M

Using capacity-on-demand, 45% savings



Current Hosting Initiatives

- **DLA's Enterprise Business System (EBS)**
 - Shifted hosting from commercial vendor to DISA
- **Health Affairs Alternate Computing Facility (ACF)**
 - \$22M disaster recovery site for DoD's electronic health record system - net savings to customer of 30%
- **Navy Web Site Consolidation**
 - @3000 web sites to DISA, starting at \$88 per month per site
- **Navy Shipyard Server Consolidations**
 - @2000 servers, virtualized down to 885 operating instances, at projected cost savings of > 50%

DISA

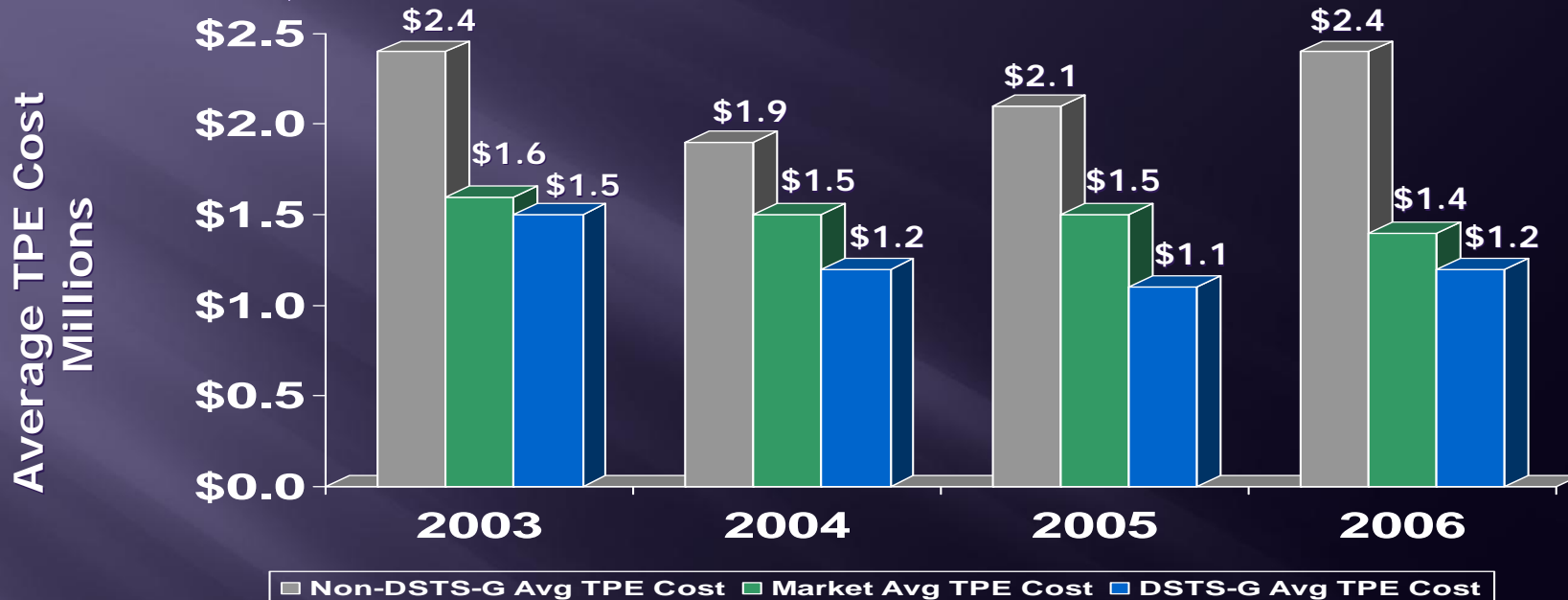
Best Value



...Customers see value of capabilities and services



Commercial Satellite Services



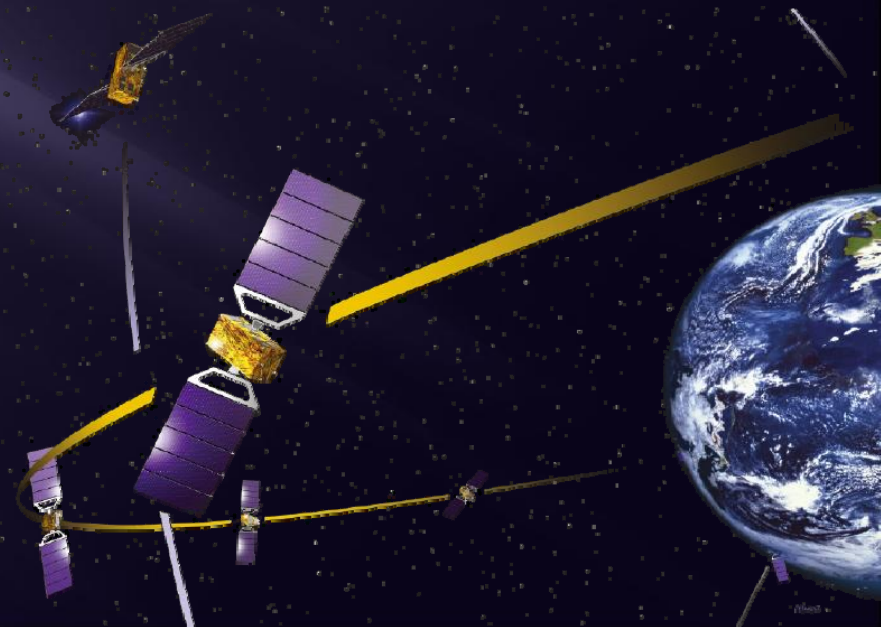
- **DoD buying power: prices now 25% below industry average**
- **Reduced DISA fee structure: from 8% to 3.41%**
- **Reduced time-to-service: since 2004, 73% reduction – now median is 21 days, targeting 4 hour emergency response**

TPE – Transponder Equivalency



Inmarsat

- Feb 08 -- Air & Maritime 'pay-as-you-go' service - 432kbps data over shared channel
- **~ 7 X faster** than previous Mobile Satellite Services!





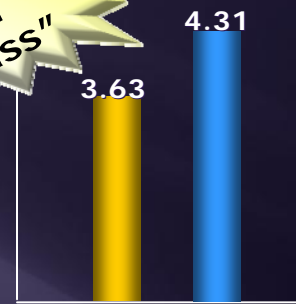
Computing Transformation

Government Personnel End Strength

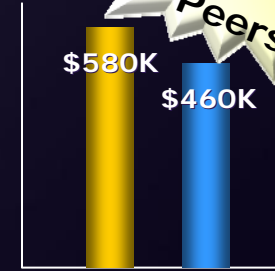
~ 85% less staff
~ 8,000 positions eliminated



Gartner Results



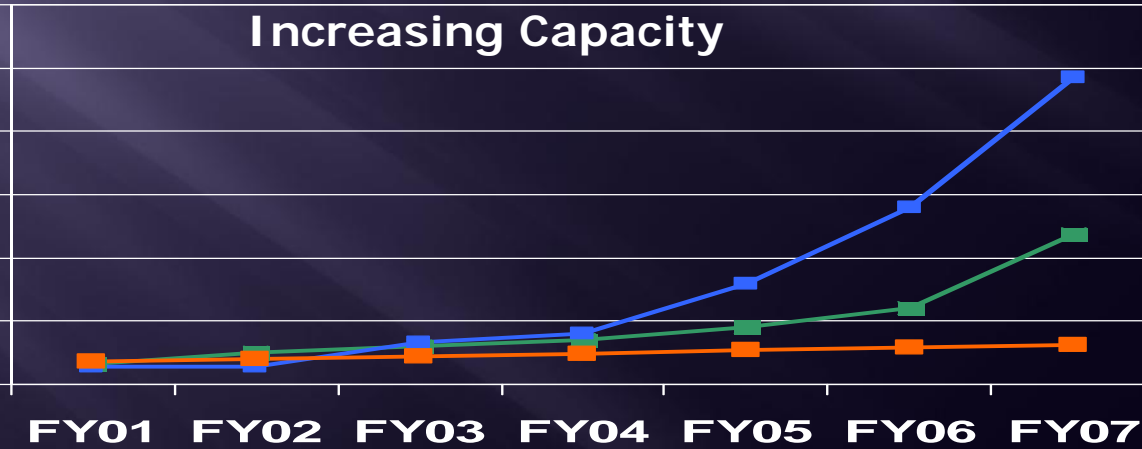
Customer Satisfaction



Server Cost

3000%
2500%
2000%
1500%
1000%
500%
0%

Increasing Capacity



- Storage Capacity
- Servers
- Mainframes



DITCO FY 2007 Numbers

**36,441 contract
actions**

\$3.9 Billion



Encore II

Small Business: 24 April

- 3H Technology
- AnviCom
- Analytical Services
- Computing Technologies
- Data Systems Analysts
- Femme Comp
- NETCONN Solutions
- Oberon Associates
- Pragmatics
- Professional Software Engineering
- Solers
- TranTech

Large Business: 2 May

- BAE Systems Information Technology
- Booz Allen Hamilton
- CACI
- CSC
- EDS
- IBM Business Consulting Services
- Jacobs Sverdrup
- L-3 Services
- Lockheed Martin Integrated Systems
- Northrop Grumman Information Technology
- Raytheon
- SAIC
- SRA
- Unisys

\$12.2 Billion Ceiling



Audit...Why Bother?

...there are tangible benefits!

➤ It will:

- Find money for you
- Accelerate vendor payments
- Improve your execution and actual cash balances
- Increase confidence of your customers and vendors
- Enable you to build better budgets and defend them with more authority
- Ensure all of your property is accounted for and identify assets for replacement
- Enable better senior-level decisions

This is not just accounting, it affects operations



Return on Investment

- Net decrease in payables - \$196M
- Asset recognition for Property, Plant & Equip - \$1B
- Improved Accounts Receivable collections over two years old - \$14.3M
- Cash reconciliation for all three funds reduced Treasury mismatches - \$270M
- Improved survivability of resources through FY09 budget process

Found Money!



BRAC Program



- Contract awarded to Hensel Phelps Construction Co.
- Designer of Record is RTKL
- Contracting Office is U.S. Army Corps of Engineers
- Site is Fort George G. Meade

- Award Contract – 29 Feb 08
- Groundbreaking – 16 Apr 08
- Begin Site Work – 15 Jul 08
- Begin Outfitting – May 2010
- Begin Relocation – Oct 2010
- Complete Relocation – Jul 2011



Delivering IT is a Team Sport

