



COMSATCOM Center Update



Agenda

- Mission
- Organization
- Future COMSATCOM Services Acquisition (FCSA)
- Fixed Satellite Services
- Mobile Satellite Services
 - Broadband Global Area Network Remote Access Service (BGAN RAS)
- Enhanced Mobile Satellite Services
- Annual Customer Survey
- Summary

COMSATCOM Center Mission



Japan Tsunami Crisis



Alaskan F-22 Recovery Mission

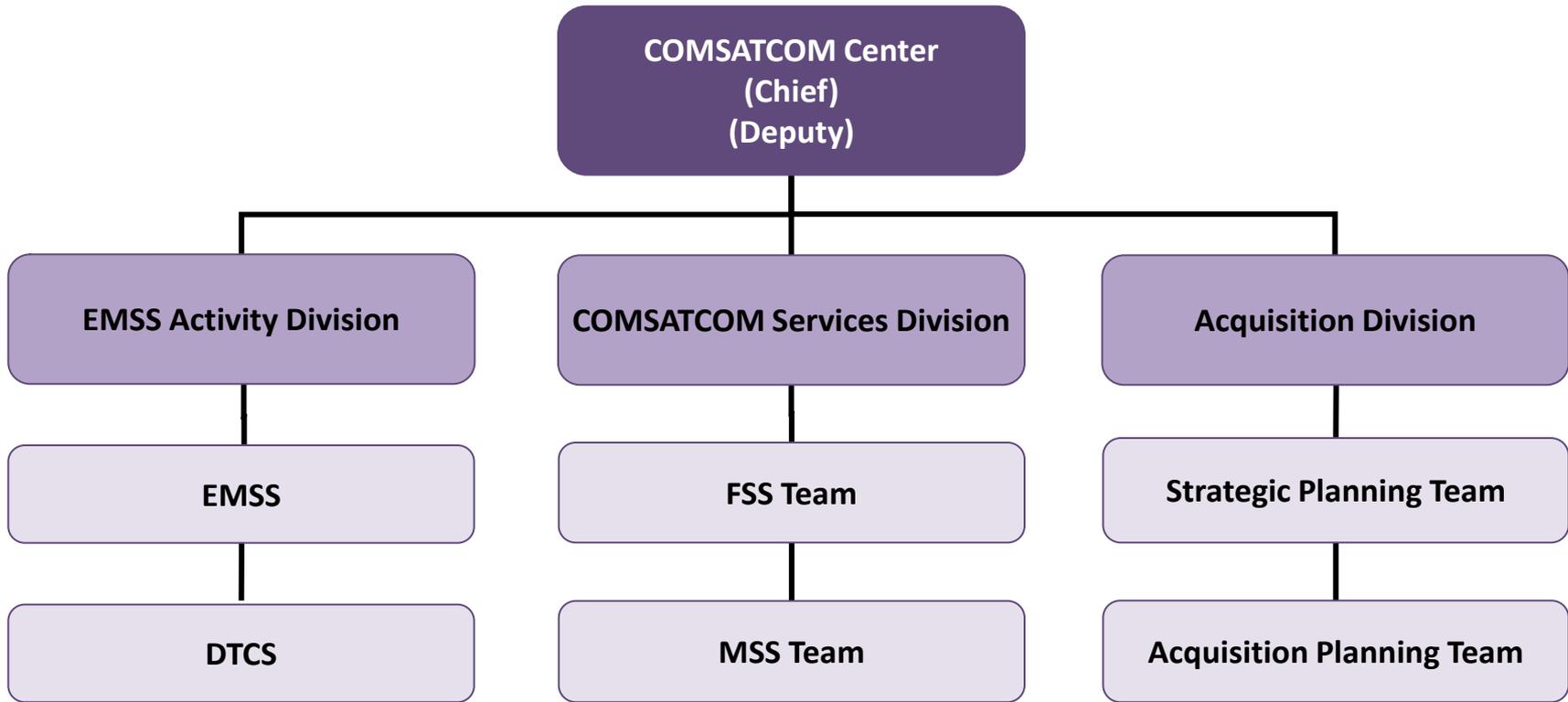


Deployed Forces

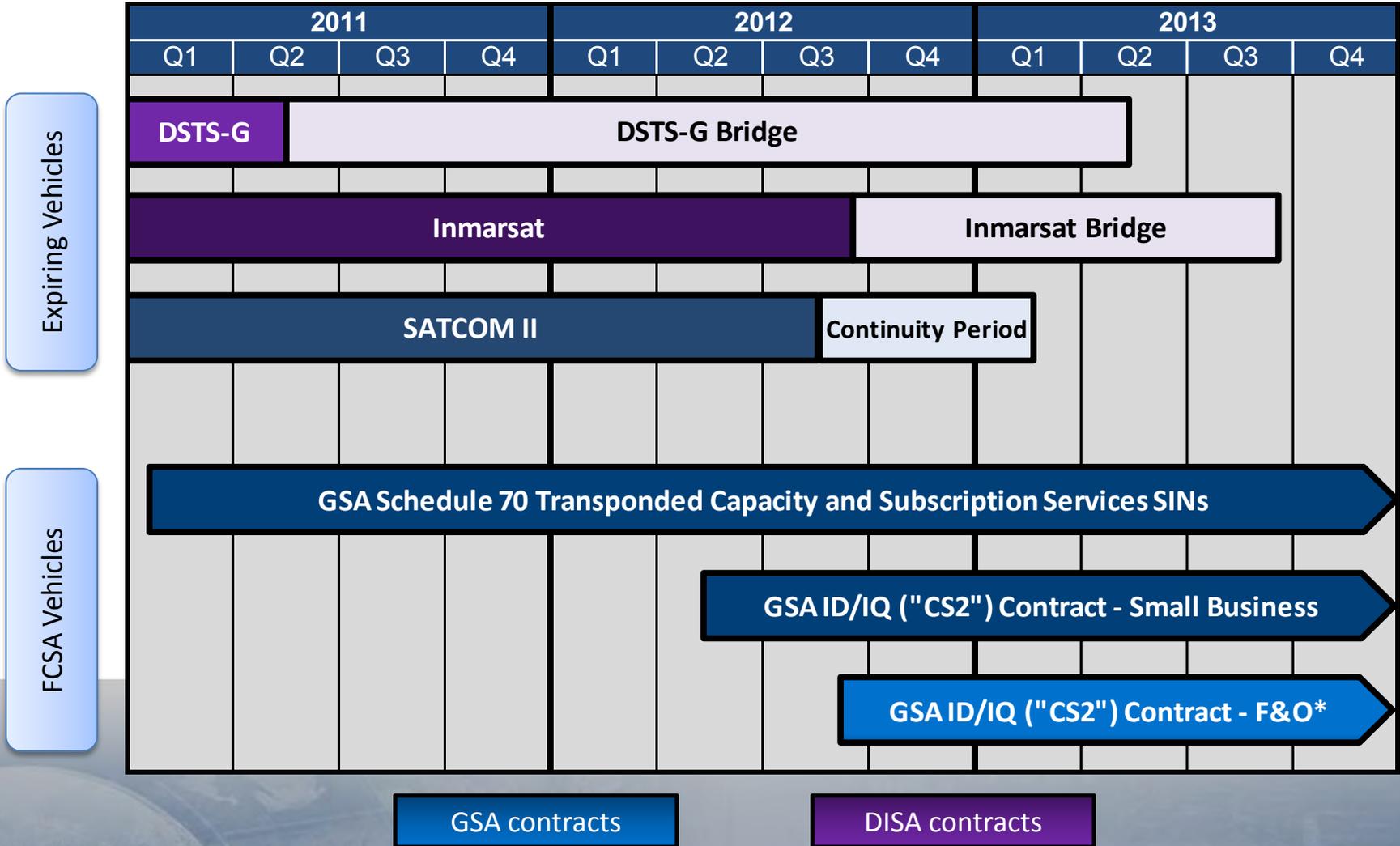


Deliver *operationally responsive, customer-focused, and cost-effective* COMSATCOM services that enable the Joint Warfighter success

COMSATCOM Center Structure



FCSA Transition



*Expected to be available late 3rd Quarter FY12

FCSA Service Areas/Contracts

Contract Mechanism

Status

Schedule 70
SIN 132.54

TRANSPONDED CAPACITY



17 Awardees
as of
1 Apr 12

Vendor defines parameters for use and price

Schedule 70
SIN 132.55

"Plug-in" SUBSCRIPTION SERVICES (\$/month, \$/minute, \$/MB)



22 Awardees
as of
1 Apr 12

Vendor defines standards, interfaces, and subscription rates

CS2 and CS2-SB Multiple Award ID/IQ Contracts

Custom END-TO-END SOLUTIONS



CS2-SB Awarded,
CS2:
currently in
source
selection

Customer defines standards, components, and interfaces (which determines cost)

Center Accomplishments

- Schedule 70 SIN 132-54 Awards
 - 17 vendors on contract
 - 89 task orders awarded
- Schedule 70 SIN 132-55 Awards
 - 22 vendors on contract
 - 4 task orders awarded
 - Army Blanket Purchase Agreement (BPA) awarded
 - Air Force BPA awarded
- Custom SATCOM Solutions (CS2) - Small Business
 - Awarded February 2012 to 4 small businesses
- COMSATCOM Center (NSK) Awards:
 - Received the DISA Outstanding Non-Technical Program/Project of the year for the DISA COMSATCOM Center's FCSA Transition effort
 - EMSS shared honors with Dahlgren (Navy) and Iridium with presentation of the 2012 Innovator award from the Mobile Satellite Users Association (MSUA) for Distributed Tactical Communications System (DTCS)

FCSA Vendors

Vendor	132-54 CTC	132-55 CSS	CS2 - SB	CS2-F&O
ADCI		X		
AIS Engineering			X	
AmericomGovSvs(AGS)	X	X		
Artel	X	X		
Bushtex*	X			
By Light			X	
Caprock	X	X		
DRS	X	X		
Globecomm	X	X		
GMPCS		X		
Hughes Network Sys	X	X		
Intelsat General	X	X		
Knight Sky*	X	X	X	
MTN	X	X		
MVS*		X		
Ritenet*	X	X		
Satcom Direct		X		
Satcom Global	X	X		
Segovia	X	X		
Skycasters*		X		
Spacenet	X	X		
Stratos		X		
TCS	X	X		
Ultisat*	X	X	X	
Vizada		X		
XTAR	X			
TOTAL: 26	17	22	4	0

* Denotes Small Business

As of 30 March 2012

FCSA: SINs 132-54 and 132-55; CS2-SB Forecasted Tasks

3QTR12: 3 TOs	
TO #	Capacity
642	144 MHz
646	108 MHz
CTC 70	144 MHz

4QTR12: 15 TOs	
TO #	Capacity
633	72 MHz
647	25.2 MHz
650	30 MHz
652	48 MHz
655	36 MHz
664	180 MHz
681	N/A
694	144 MHz
695	144 MHz
696	72 MHz
697	149 MHz
699	36 MHz
700	100.4 MHz
701	19.9 MHz
CSS 11	13.1 MHz

Inmarsat BPAs	
BPA	Size
Aero	735 CSAs
Maritime	Under 50 CSAs
Legacy	Airtime for ~2000 CSAs
BSTA	761 CSAs
SOCOM	522 CSAs



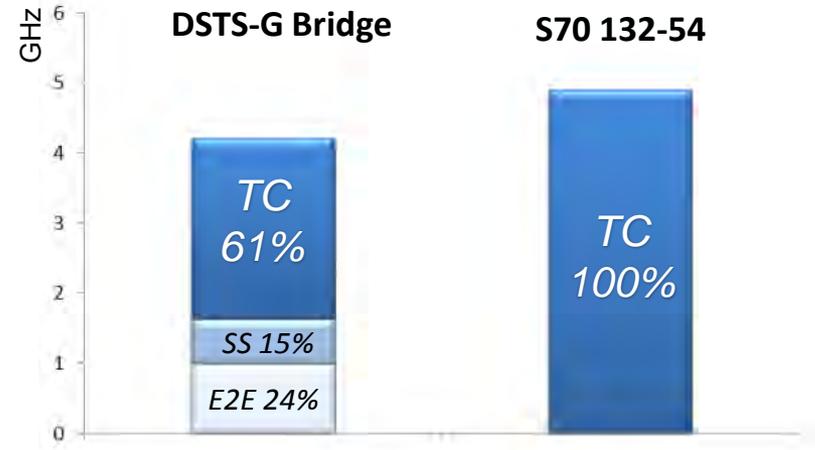
- PROJECTIONS ARE SUBJECT TO CHANGE
- Expected renewal times based on expiration of current option period
- Does not include other expiring contracts (e.g., GSA SATCOM II and new work)
- Projected bandwidth figures may change with re-compete effort

CS2-SB and CS2-F&O Status

- Custom SATCOM Solutions-Small Business (CS2-SB)
 - Awarded February 2012
 - Awardees (4) :
 - Knight Sky
 - Ultisat
 - AIS Engineering
 - By Light
- Custom SATCOM Solutions-Full & Open(CS2-F&O)
 - Award TBD
- CS2 General Technical Requirements:
 - Complete, customized engineered COMSATCOM End-to-End Solutions, may include any combination of:
 - Fixed satellite services (FSS) or mobile satellite services (MSS) components
 - Service enabling components: terminals, teleport, and terrestrial interface tail circuits
 - Licensing, integration, installation, testing, network mgmt, engineering and training

Fixed Satellite Services (FSS)

- As of the end of FY11, over 4.9 GHz have been awarded on Schedule 70 for FSS leases*
 - Remaining requirements on DSTS-G must be transitioned to S70 before Feb 2013
 - Small amount of bandwidth (~17 MHz) awarded to date on SIN 132-55 (Subscription Services)



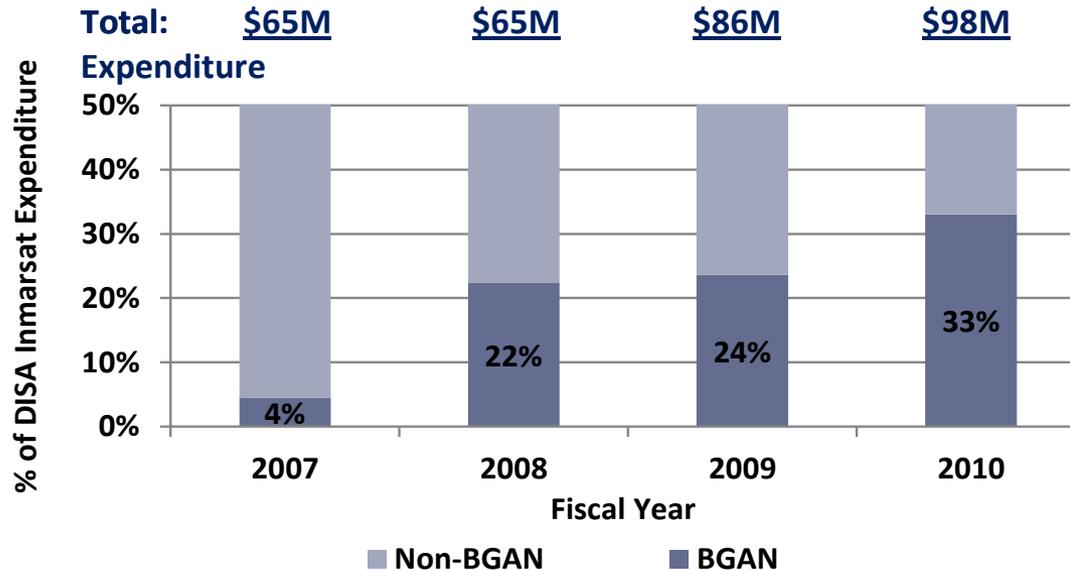
Examples of Requirements
UAV: ISR Global Hawk (FY10)
Logistics: Army Connect the Logistician
Broadcast: Global Broadcast Service
Tactical operations: JNN and Phoenix Operations and Training, Marine Corps Support Wide Area Network (SWAN)
Humanitarian assistance: Tsunami Relief Efforts (FY10)
Other: PACOM CSC Commercialization Project (FY10)

*The FY11 Annual Report Data Collection is still in progress; All results should be considered preliminary

Influences on FSS Pricing

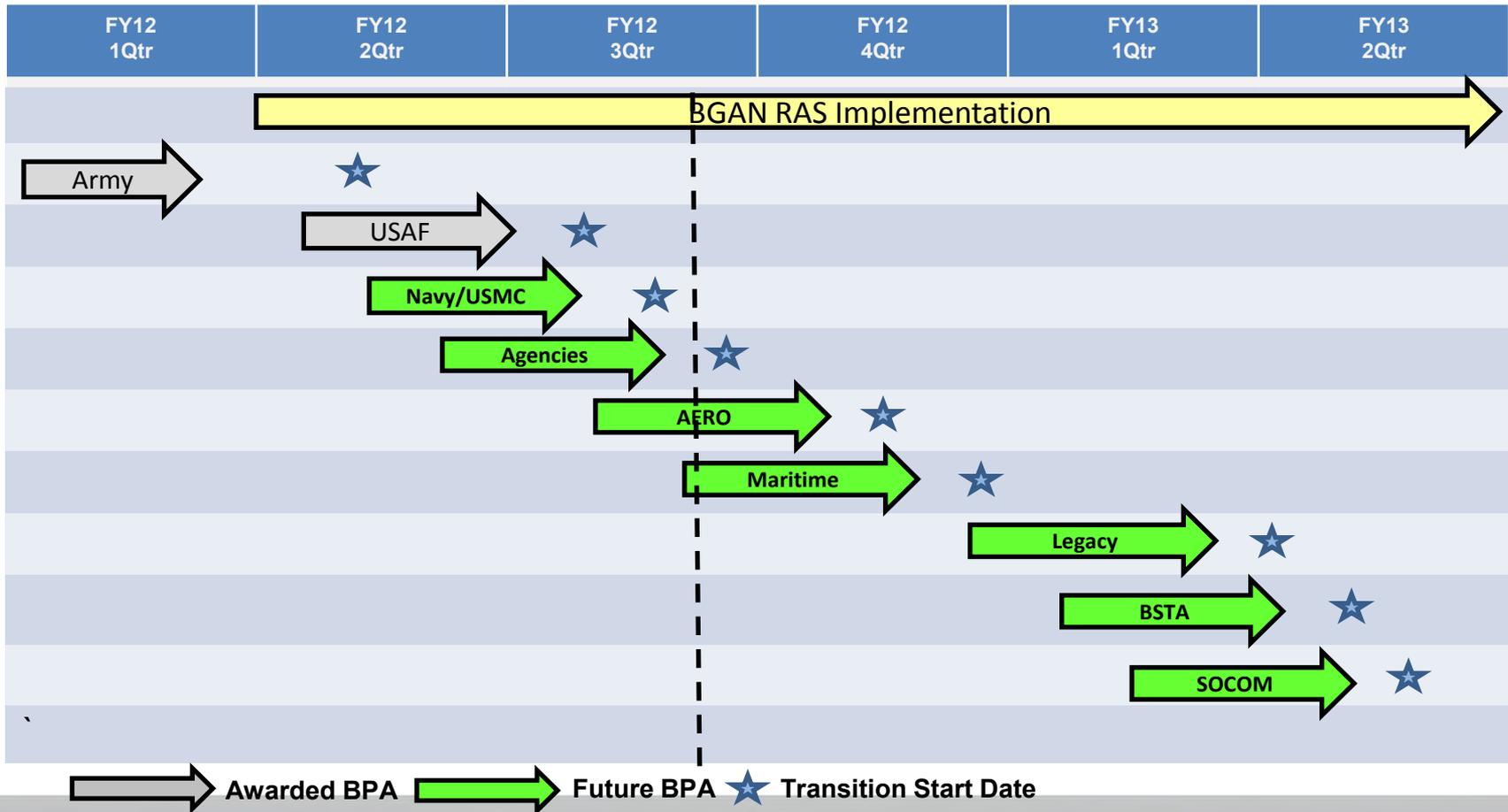
- Three key contributors influence price:
 - Supply and Demand per region
 - Duration Between Recompetes
 - Directed Source
 - Largest increases seen here
 - Working with customers to define a REQUIREMENT vice a SOLUTION

Mobile Satellite Service (MSS) Requirements



- DoD MSS requirements satisfied primarily through the DISA Inmarsat contract vehicle
 - In 2002, Inmarsat contract awarded to five integrators, contract expires in June 2012
 - ~7000 ongoing MSS requirements at end of FY11
 - Inmarsat BGAN services constitute a growing share of airtime expenditures on the DISA Inmarsat contract

MSS BPA Schedule

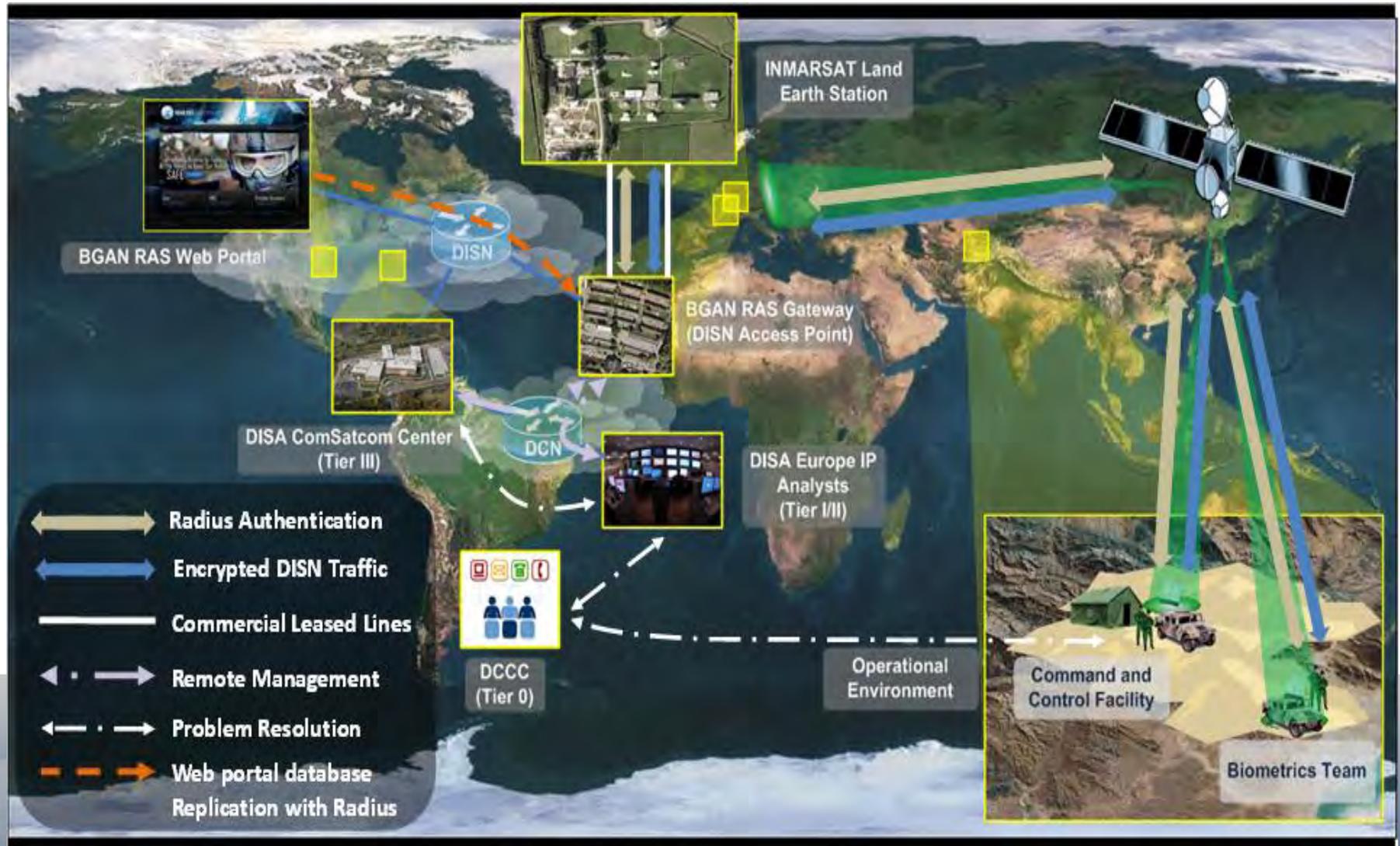


Blanket Purchase Agreement (BPA) are used as vehicles to award each group of MSS. Each BPA is for a period of performance of five years, with one base year and four one-year options.

What is BGAN RAS?

- Requirement: Provide a secure, managed, DoD enterprise gateway that enables BGAN users to reach back to NIPRNet and SIPRNet
- BGAN RAS provides an enterprise solution to establish direct connections between Inmarsat's ground segment network and DISA's infrastructure
 - IP transport for DoD users whose networks connect to the DISN
 - Simplifies the supply chain making troubleshooting easier
- Secures the connection via standard IA architecture hosted at a DoD DECC
 - Terminate IPsec VPN connections at BGAN data gateways in Europe
 - Implement HAIPE security associations allowing SIPR traffic over the network
- Customer support from DISN Global Support Center (DGSC)
 - The DGSC will integrate support processes and customer support, acting as a single point of contact (SPOC) to the customer

BGAN RAS Operational Overview



BGAN RAS Service Attributes

- High Mission Assurance: Provide network path using DISN infrastructure without reliance on public Internet
- Operational Efficiencies: Remove need for users to manage own BGAN access, obtaining access through the DISN, vice Internet
- Net Centricity: Protect user traffic as it traverses Inmarsat's network by terminating user VPNs at DISN entry points
- NetOps: Provide the Government an opportunity to monitor and manage a larger portion of the E2E path than possible today by connecting the Inmarsat network to the DISN through appropriate security boundaries
- DISA Controlled IP Address Space: Assign IP addresses to terminals using BGAN RAS from a pool of DoD IP address space

BGAN RAS Roadmap

Near Term (FY12)

- ▶ **Test & Install BGAN RAS in EUR**
 - ▶ Test at Ft. Meade Lab
 - ▶ Obtain IATT/IATO
 - ▶ Install in Europe
 - ▶ Verify network installation
- ▶ **Define BGAN RAS Concept of Operations (CONOPS)**
 - ▶ Define the operational scenarios and troubleshooting as it pertains to all RAS stakeholders
- ▶ **Define Sustainment Strategy for EUR and PAC**
 - ▶ Determine the sustaining entity and approach (e.g. incrementally, all at once, or after EUR/PAC install)

Mid Term (FY13-FY15)

- ▶ **OT and deployment of RAS in Europe**
 - ▶ Conduct OT with pilot (early FY13)
 - ▶ Obtain Fielding Decision
 - ▶ Transition selected users to RAS for IOC concurrence (Obtain IOC)
 - ▶ Transition remaining users interested in RAS in Europe
- ▶ **Initial planning, design, test, install OT and deployment in PAC**
 - ▶ Design redundant capability for PAC
 - ▶ Procurement of equipment
 - ▶ Execution of Inmarsat PAC option
 - ▶ Test in Ft. Meade Lab
 - ▶ Obtain ATO for redundant system
 - ▶ Install in PAC
 - ▶ Conduct OT with Pilot
 - ▶ Obtain fielding decision
 - ▶ Transition selected users to RAS for FOC concurrence (Obtain FOC)
 - ▶ Transition remaining users interested in RAS in PAC
- ▶ **Transition Sustainment from NSK to desired entity (October 12 timeframe)**

Strategic (FY13–2025)

- ▶ **Enhance the BGAN RAS gateway as required to include voice, video, etc.**
- ▶ **Conduct assessment of current MSS/FSS footprint and determine viable solutions like BGAN RAS – (under NSK)**
- ▶ **Initial planning, design, test install, OT and deployment of like capabilities**

EMSS Gateway



- EMSS provides an added layer of security for Iridium service through a DOD operated and maintained gateway

EMSS Products



- 9505/9505A Handset – satellite phone with Iridium Secure Module (ISM)
Rugged and reliable, the Iridium 9505A satellite phone is small enough to carry in a backpack and very simple to use
- Motorola Pagers – standalone and follow-me paging, limited text messaging capability. Pager has to be registered in the region where you are using it
- Short Burst Data (SBD) modems – simplex data transmission modem; can be used with 9505/9505A; speeds of up to 2.4k/sec
- DTCS Radio Only (RO) – secure tactical hand-held satellite push to talk radio providing over the horizon beyond line of sight data communications.
- SHOUT NANO - personnel location device

Shout Nano

Global handheld, two-way satellite messaging and personal tracking device. Utilizes short burst data (SBD) service to provide location information determined by a GPS receiver, two-way inbound and out-bound status, text messaging and emergency alert notifications.

Advantages:

- Ultra low power consumption; drawing less than 35 μ A during sleep
 - Can send a position report every hour for up to two months
- AES 256-bit encryption
- Global Coverage

Features/Capabilities:

- Way-Point Tracking
- Normal Tracking
- Emergency Alert
- Canned-Text Messaging
- Check-In

Pricing (includes 2% DITCO fee):

- Device \$750+activation fee per device \$81.60
- Unlimited usage charges as low as \$133.29/mo

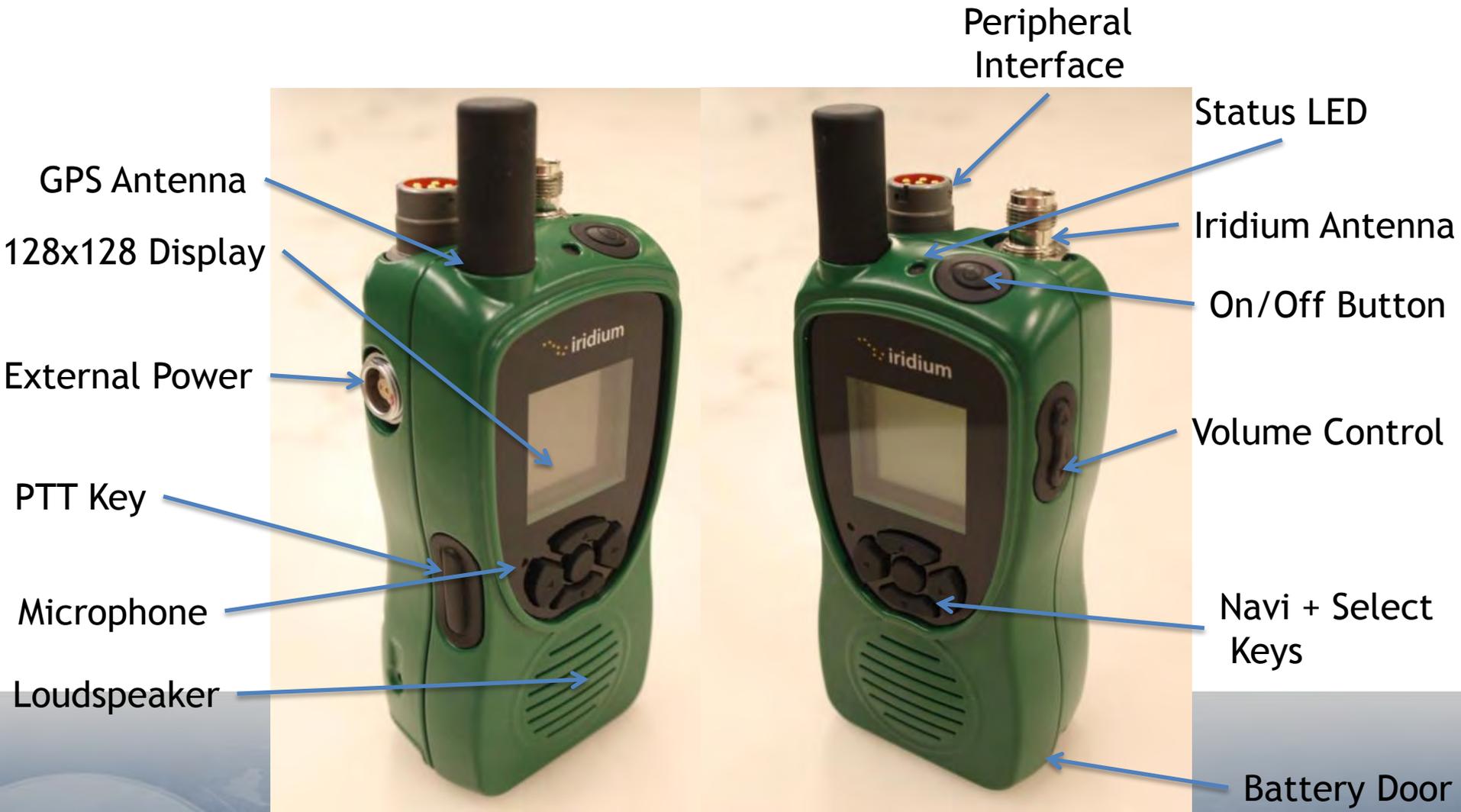


Distributed Tactical Communications System (DTCS)

- DTCS is a secure tactical hand-held satellite radio.
- Provides on-the-move, over-the-horizon, beyond line-of-sight, voice, position location information, and narrow band data communications to disadvantage users in austere environments
 - Known as a "netted" satellite communication capability
 - Leverages the Iridium satellite constellation
- The DTCS-RO Map is a ruggedized Windows Mobile 6 PDA; tethered to a DTCS RO via DB9 serial connector
 - Supports body-worn operations using kitted pouch accessory
 - Kitted with 32 GB SD card to support configurable mission loads



DTCS Ph3 Radio - Overview



DTCS Phase III Overview

- OTH, OTM, BLOS connectivity with no ground infrastructure
- Tactical Netted Broadcast Voice or Data (not telephony-based)
- PLI Injection into other C2 systems
- Point-to-Point capability retained
- Increased reliability; greater voice quality
- Improved system management

	SVSB	SVMB	MVMB
	Phase 1	Phase 2	Phase 3
Timing	2006	2009	2013?
Net Range	100 mi @ 95% reliability	250 mi @ 95% reliability	Global
Max # of simultaneous nets	250	16,000	64,000
Max # of simultaneous nets in spot beam	50	50	50
Max # of simultaneous nets in SV panel	100	100	100
Max # of simultaneous nets in SV	150	150	150
PTT latency	~2s	~2s	~.5s for a tactical net
Netted Data	No	Yes	Yes
PLI	Yes	Yes	Yes
Global PLI	Yes	Yes	Yes
Local PLI	Yes	Yes	Yes
Gateway based PLI	No	No	Yes
# of PLI devices per net w/ 1 min update	< 20	<20	~ 346
Gateway based broadcast	No	No	Yes
Efficient 2-Way C2/SA	No	No	Yes
Managed Nets	No	No	Yes

Phase 3 Capabilities Path

Near Term (FY12)

- Complete RDT&E for FOC System
 - Radio development & USG/DoD enhancements
 - Core ground system development
 - Basic customer management tools
 - Satellite software upload
- Complete GW SAB Capability
- Initiate Planning for GW System
- Initiate Support Activities
 - Command & Vehicle Platform kits
 - Add-on Accessories
 - External Connectivity (MMC, Lighthouse, Gotham)
- Demo System Capabilities
 - Release 1 (voice, PLI) – 3Q FY12
 - Release 2 (?) – 4Q FY12

Mid Term (FY12-FY14)

- Complete GW FOC
 - Procurement
 - Installation
 - Integration & Test
 - Final Acceptance Test
 - System Commissioning
- Complete System LTA/LUE
 - ConOps
 - Logistics
 - Training
- Offer Products & Services
 - DDOE
 - Transition new sales to Phase 3
 - Field Service & Customer Support
- Build out Ground System
- Build out Customer Tools
 - Secure Web-enabled Management
 - Management for Disadvantaged Users
- Expand Product Suite
 - C2
 - Secure Comms
 - Data Only Sensors
 - Command & Vehicle Platform Kits

Strategic (FY13–25)

- Maintain System
- Phase 2 End-of-Life
 - System Decommissioning
- Transition to Iridium NEXT
 - First launch 4Q 2015
 - Phase 3 services are fully integrated in Iridium NEXT launch software load
- Build out System Capabilities
 - In response to emerging customer requirements and needs
 - Leverage new mobile technologies
 - Leverage Iridium NEXT bandwidth and performance improvements

FY12

FY13

FY14

FY15

FY16 FY17 FY18 FY19 FY20 ... 2025

EMSS Ordering Information

- Products are ordered using the DISA Direct Order Entry System (DDOE) via DISA Direct. To order products and services, go to the DISA Direct website at <https://www.disadirect.disa.mil/products/asp/welcome.asp>
- You can use the 1-800 customer service number at the bottom of the homepage that can help you register for an account and begin the ordering process.
- On the left pane of the home page you will see “FY12 Billing Prices” https://www.disadirect.disa.mil/products/asp/BillingRates/FY12_DW_CF_Price_Book_Final.pdf

Contact Information

- FSS customer service
 - Global Satellite Support Center (719) 554-5531
 - Regional Satellite Support Center (813) 828-6845
- MSS customer service
 - (301) 225-2600
- EMSS customer service
 - (301) 225-2800
- For assistance with EMSS device operation, maintenance, and configuration
 - General Dynamics C4 Systems, Customer Service Organization, customer.service@gdc4s.com, (877) 449-0600

Annual Customer Survey

- The annual COMSATCOM Center Customer Satisfaction Survey is critical to service improvement efforts
 - The purpose is to better understand customers' overall level of satisfaction with COMSATCOM Center's operations, customer service, and commercial satellite services
 - The survey is an easy, web-based survey sent to customers
- Types of statements*
 - Overall satisfaction regarding services provided at the DISA-wide level with statements ranging from acquisition process to price of services
 - Specific satisfaction geared towards COMSATCOM services only with statements ranging from technical expertise to post-award assistance

*For all statements, customers are asked to exclude experience(s) related to vendor-provided services

Summary: DISA's Value

- Potential reduction of contract administration overhead: DISA will manage the contract administration and acquisition process to match service requirements
- FCSA creates a common marketplace for all USG: FCSA leverages the government's buying power by consolidating DISA & GSA service offerings into one mechanism
- Commercial Satellite Systems Expertise: DISA understands the dynamics of the Commercial Satellite marketplace and leverages this past experience to meet requirements effectively
- Operational support: DISA provides ongoing customer support after service activation (i.e. EMI/RFI Identification, Characterization, AND Geo-Location)

