

DISA Customer Conference Teleport Program Office (TPO)

Agenda

- Teleport Snapshot
- Gen 3 Update
- West PAC Update
- TPO Strategic Thrusts

Teleport Snapshot

TPO Vision & Mission

Vision: Be the DoD leader in acquisition, fielding, and lifecycle management of assured joint enterprise communications gateways via SATCOM

Mission: Extend secure DISN services via net-centric, multi-band SATCOM lifecycle management to the warfighter deployed worldwide

Teleport System Locations



Generational Capabilities

- Gen 1 - *Complete*
 - Added terminals and baseband to expand access and throughput capacity
 - Added Ku and C (commercial); UHF, EHF, Ka access
- Gen 2 – *Commissioned (FD2QFY11)*
 - Adds IP SATCOM Modems and Net-Centric baseband
 - Dynamic bandwidth allocation capability with Linkway, iDirect and Linkstar IP Modems
- Gen 3 – *In progress*
 - Adds specified Gateway enhancements

TPO Scope

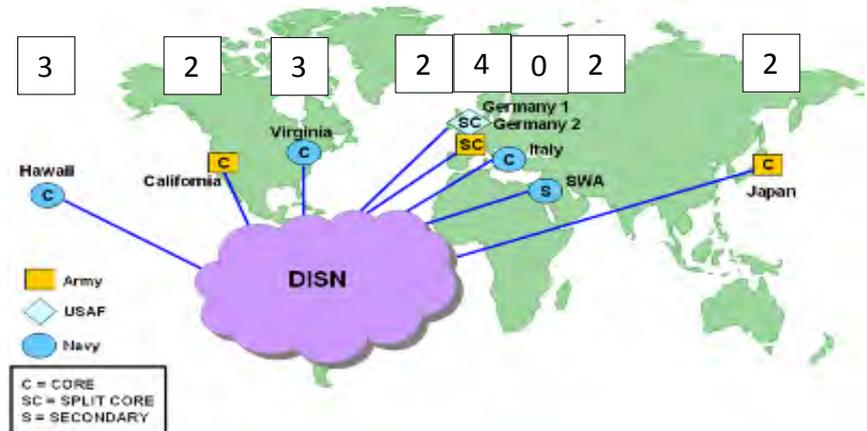
- In 2010, DISA expanded scope of the TPO to:
 - Teleport PMO
 - JIPM PMO
 - Emerging Technologies PMO
- WIPTs: Program Control; SE; Operations

Gen 3 Phase 1

Capability

- Upgrades Teleport EHF system to support Extended Data Rate (XDR)
- Fields 18 operational Advanced Extremely High Frequency (AEHF) XDR Navy Multiband Terminals (NMT)
- Provides 150Mbps of worldwide Gateway capacity to connect AEHF users to DISN and transport services

Locations



Key Milestones

- | | |
|----------------------------|----------|
| ✓ PDR | Mar 2010 |
| ✓ CDR | Jul 2010 |
| ✓ NMT Program MS C | Aug 2010 |
| ✓ Gen 3 Phase 1 MS C | Sep 2011 |
| ❑ Fielding Decision Review | 2QFY14 |
| ❑ Full Phase Capability | 3QFY15 |

NMT Terminal

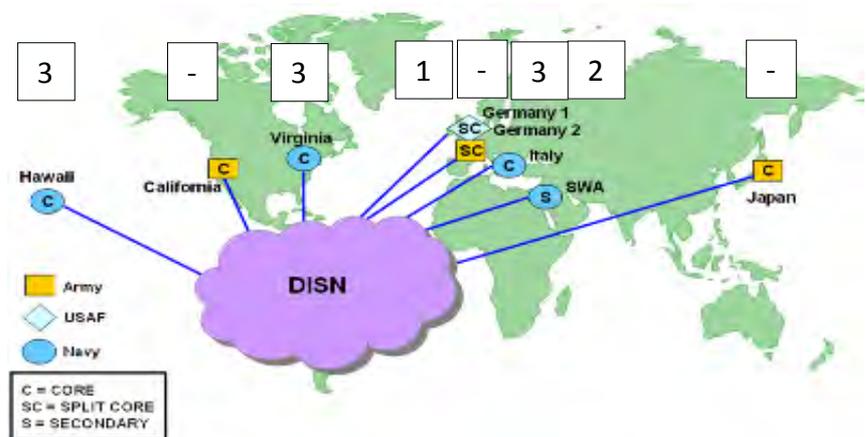


Gen 3 Phase 2 Update

Capability

- Enhanced X/Ka
- Replaces DSCS terminals approaching end-of-life as WGS constellation expands to six satellites
- Fields 14 Wideband Global System (WGS) simultaneous X/Ka-band Modernization of Enterprise Terminals (MET)
- Leverages seven Army MET fieldings to meet coverage/capacity requirements
- Results in a gateway configuration capable of 18.3 Gbps of worldwide X/Ka-band capacity

Locations



Key Milestones

- | | |
|----------------------------|----------|
| ✓ PDR | Mar 2010 |
| ✓ CDR | Jan 2011 |
| ✓ In-Progress Review | Jul 2011 |
| ✓ Procure 2 test articles | |
| ❑ MS C Decision | May 2012 |
| ❑ Fielding Decision Review | 2QFY14 |
| ❑ Full Phase Deployment | 4QFY17 |

MET Terminal

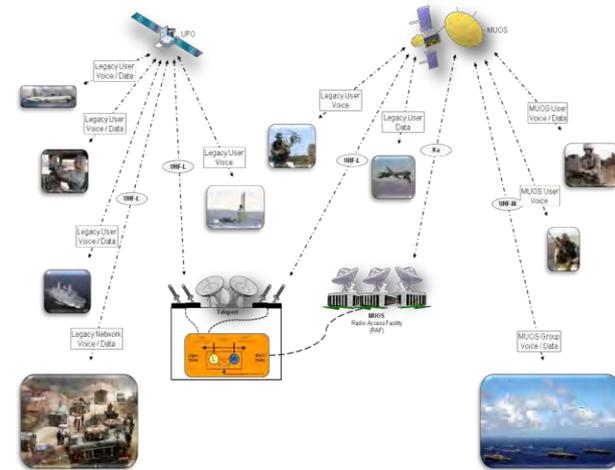


Gen 3 Phase 3 Update

Capability

- MUOS to UHF Legacy Interoperability
- Upgrades baseband translation to support interoperability between Mobile User Objective System (MUOS) and UHF legacy users
- Prevents isolation of MUOS users from critical communications services
- Fields six MUOS to Legacy Gateway Components (MLGC) to provide 300 simultaneous worldwide accesses

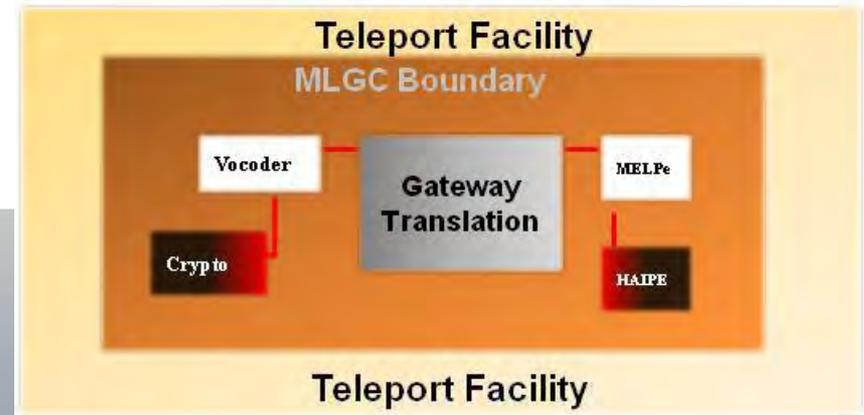
Architecture



Schedule / Events

- **Re-planning timeline and execution strategy due to MUOS ground segment and JTRS delays**

MLGC Teleport Subsystem



West PAC Update

Strategy

DOD CIO leading delegation to conduct TIM and seek further concurrence from Australia to develop West PAC gateway.

Location



Projected Teleport Capabilities

Terminals

- C
- ② X/Ka - MET
- Ku
- Ka
- UHF
- EHF - FOT
- AEHF - NMT

Baseband

- Circuit
- IP Suite
- TIP
- A-TIP

Legend

- Exists
- Planned

inside circle indicates terminal qty

Benefits

- Fills X & Ka-Band ground segment gap for WGS satellites in the region
- Supports US-AUS MOU for WGS

Teleport Strategic Thrusts

- Paradigm shift **FROM** Teleport system as pre-positioned, surge capability **TO** use in day-to-day operations
- Lessons learned from Gen 2 Post-Implementation Review - engage user community for more meaningful metrics
- Collaboration with Gateway Program Office and requirement/user communities to address emerging requirements and technology roadmap synchronization
- Lead development of Next Generation Situational Awareness and Network Operations tool sets
- Developing DoD Teleports to be a true peer to the Terrestrial-based networks

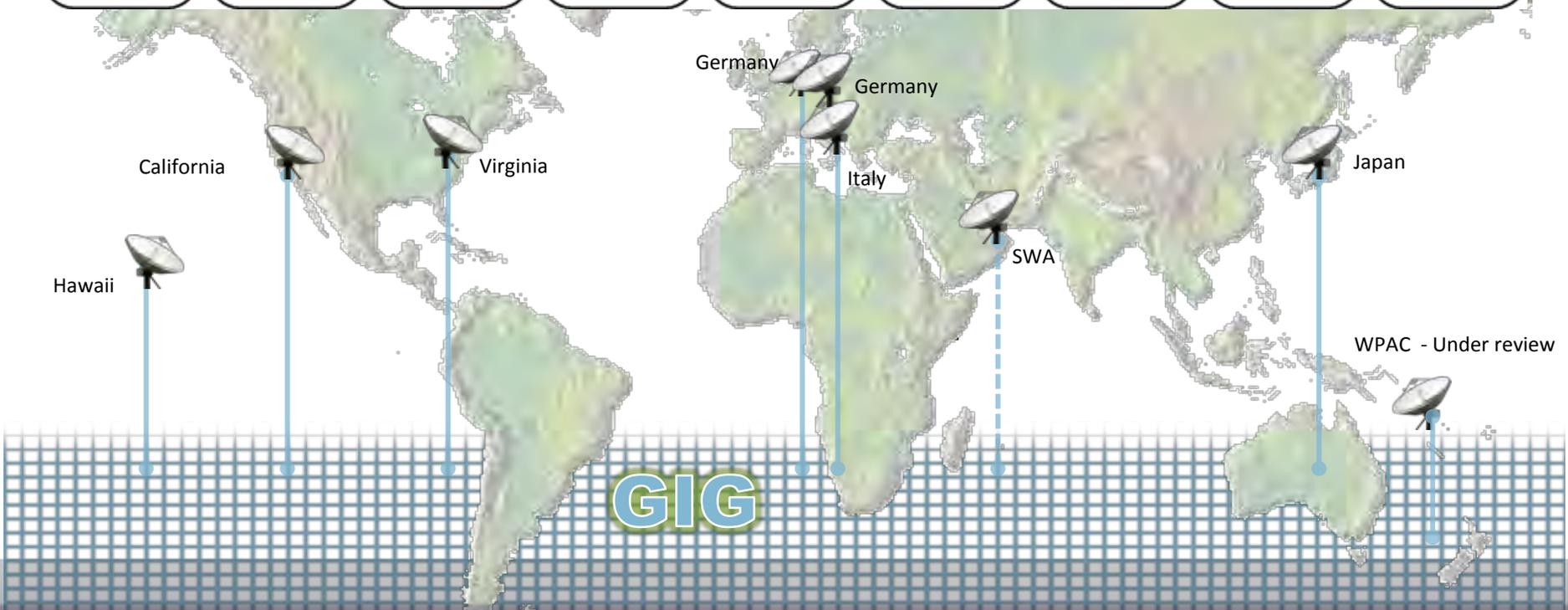
QUESTIONS



BACKUPS

Teleport System

Wahiawa 3 EHF • 2 UHF 2 C • 2 Ku 3 AEHF • 2 Ka 3 X/Ka MLGC	Roberts 3 EHF • 2 UHF 2 C • 2 Ku 2 AEHF • 2 Ka 2 X/Ka MLGC	Northwest 3 EHF • 2 UHF 2 C • 2 Ku 3 AEHF • 1 Ka 3 X/Ka MLGC	Ramstein 3 EHF • 2 UHF 1 C • 1 Ku 1 X/Ka MLGC	Landstuhl 1 C • 1 Ku 4 AEHF • 3 Ka 3 X/Ka	Lago Patria 3 EHF • 2 UHF 2 C • 2 Ku 2 AEHF • 2 Ka 3 X/Ka MLGC	Bahrain 3 EHF 2 AEHF 2 X/Ka	Buckner 3 EHF • 2 UHF 2 C • 2 Ku 2 AEHF 2 X/Ka MLGC	WPAC (TBD) 2 X/Ka 2 AEHF* *if Guam
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DoD Teleport is a System Comprised of Sites and Connectivity Satisfying the Operational Requirements of the Warfighter

DoD Teleport connects deployed warfighters using circuit switched and IP technologies

Gen 1 / Gen 2 / Tech Refresh

Gen 1 / Gen 2 Description

- Initial upgrade of satellite telecommunication gateways at 6 selected STEP sites

Tech Refresh (FY12 Focus Areas)

- EHF FOT secure ROIU
- Cisco 2611XM TIP Router Replacement (*EOSM Mar 2010)
- Cisco Unified Call Manager (CUCM) for DSN (*EOSM Jan 2013)
- Lantronix Communications Server (EOSM)
- CTCS for Ku and C band terminals
- Cisco 7609 40 Port Ethernet Modules
- GMS Out-of-band Subsystem (Router/Switch)
- GMS Operator Interface (Server/Thin Clients)
- iDirect Evolution v2.3 Hubs for PAC
- iDirect Evolution v2.3 HLC CONUS + Lab Upgrade to level 2
- JIPM NCC Hubs

Key Milestones

- | | |
|----------------|----------|
| ✓ Gen 1 IOC 1 | Mar 2004 |
| ✓ Gen 1 IOC 2 | Nov 2006 |
| ✓ Gen 1 IOC 3 | Mar 2007 |
| ✓ Gen 1 IOC 4 | Sep 2010 |
| ✓ Gen 2 FOC | Oct 2010 |
| ✓ Gen 2 PIR | Sep 2011 |
| • Tech refresh | Ongoing |

Benefits

- SATCOM capability expanded to C, Ku, UHF, EHF, Ka bands
- Net-centric IP implementation
- Two Teleport sites in view anywhere around the world