Defense Information Systems Network (DISN)

An Essential Weapon for the Nation’s Defense

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A global enterprise network that enables information superiority and critical communications

The core of the Department of Defense (DoD) Information Network (DoDIN)

A combined campaign of DoD owned and leased telecommunications networks, undersea and terrestrial transport, satellites, gateways, multinational coalition information networks, subsystems, and operations support to:

- **Enable** the U.S. Military and mission partners to leverage, sustain and exercise the distinct advantages over our adversaries by ensuring that the voice, video and data traversing the DISN are immune from unfriendly attacks and are able to operate in a degraded environment
- **Support** command and control, intelligence, logistics, medical, and other essential missions across the full spectrum of military operations
- **Connect** Warfighters with each other and their sustaining bases; U.S. Forces to their coalition partners; and DoD to intelligence, federal, state, and local agencies
- **Integrate & Deliver** capabilities fluidly across domains, ranks, U.S. Territories and Allies.
DISN’s Operational Focus

Deliver Senior Leadership Command and Control and Cybersecurity Sovereignty

Allow Commanders to conduct Joint Operations through a resilient, robust, secure and normalized network

Support Warfighter missions by providing access to a global network that is virtual, intelligent, consolidated, secure, elastic, provisioned and managed in real time

Homeland Defense Drug Interdiction
USSOUTHCOM/ USNORTHCOM

Jukebox Lotus/ Juniper Micron/ Juniper Nimbus
USAFRICOM

Inherent Resolve, Iraq/ Syria
USCENTCOM

Freedom Sentinel, Afghanistan
USCENTCOM

Resolute Support, Afghanistan
USCENTCOM

Operation Gladiator Shield
USCYBERCOM

The Unblinking Eye
USSOCOM

Atlantic Resolve
USEUCOM
Network Portfolio
- Terrestrial Transport
- Gateways
- Multi-National Information Sharing
- Senior National Leadership Communications
- Special Services

SATCOM Portfolio
- Gateway & Teleport Programs
- Enhanced Mobile Satellite Services
- Unified Video Dissemination System - Airborne Intelligence, Surveillance, and Reconnaissance
- Digital Intermediate Frequency
- Path Finders
- Commercial SATCOM

DISN $24 Billion Commercial Equivalency Network Infrastructure

Network Management
- Enterprise Network Operations Center
- Efficient / Flexible / Responsive
- Deliverying Service Management Worldwide

DISN Services
- Enterprise Operations & Network Management
- Network Management
- Network
- Transport
- Voice
- Data
- VPN
- SATCOM
- Messaging
- Content Delivery
- Spectrum
- Mission Support

DISN Optical Network
- 14,800 Optical Fiber Miles
- 38,900 Managed Devices
- 1,100 Worldwide Locations

DISN IP Network
- 17,000 Circuits

DISN Services
- 12.5 Tbps Backbone
- 14,800 Managed Devices
- 38,900 Optical Fiber Miles
- 17,000 Circuits
- 1,100 Worldwide Locations

150K+ Worldwide Users
100+ Nations
10 Internet Access Points
8 Mobility Gateways
48 Satellite Gateways
DISN Grand Design – Evolution Vision
FY 2023

United In Service
- Centralized global management framework focused on the warfighter
- Expanding the service portfolio to meet changing mission needs
- Enhanced situational awareness providing superior cyber security and perimeter protection against threats

Evolving The Network
- Service layer converged on a common resilient IP core
- Dynamic congestion control and enhanced network quality of service
- Auto-provisioning and network function virtualization
- Resilient & survivable network infrastructure
- Next generation self-recovering optical transport network
- Transport layer security via DISN edge-to-edge encryption
- 400 Gbps link capacity
- Integrated, automated IP-optical network capacity management

Connecting The User
- Access to any data, any device, anywhere
- Single point of entry
- Global, high bandwidth satellite coverage
- Encrypted & protected data
- High bandwidth & secure Internet and telephone network access

Emerging DISN Services
- Everything over IP (EoIP) Service
- High Data Rate Wavelength Service
- Bandwidth Calendaring
- On Demand Capacity
- High Data Rate SATCOM Service
- Virtualized Network Function Service
Software Defined Network (SDN) & Network Function Virtualization (NFV)

Applications

By Network Segment

SDN Terrestrial Provisioning

JRSS VNF Management

SDN SATCOM Provisioning

Collaboration VNF Management

Service Request
Orchestration & Control

DISA STOREFRONT

SERVICE ORCHESTRATOR

SATCOM Provisioning

Terrestrial Provisioning

NFV

Traffic Engineering

Transport Network

Traffic Engineering

Transport Network
IE TOP Priorities

1 - DISN Enhancements

Quality of Service
FY2018

Software Defined Network
FY2018

Gray Core Services
FY2018

Social Networks
FY2018

Next Generation Optical Network
FY2018

Commercial Ethernet Gateways
FY2018

DoD SATCOM SUNS IP Optimization
FY2020

Gray Core Services/mobility

Multiprotocol Label Switching (MPLS) Router Network
FY2019

Trans-Oceanic Upgrades
FY2018
IE TOP Priorities

2 - Legacy Elimination

**TDM Elimination**
- LSTD 4Q FY2018
- SONET/PDH 4Q FY2020

**SIPRNet Access Migration**
- FY2018

**NIPRNet**
- Virtualized Routing and Forwarding / Consolidation
- FY2019

**Static Route Elimination**
- FY2018

**Defense Red Switch Network – TDM to IP**
- FY2018
IE TOP Priorities

3 - Survivable Infrastructure

- **Networking 101 - DISA Computing Center Connectivity**
  - FY2020

- **Increasing Redundancy and Resiliency**
  - FY2020

- **Standard Core Architecture in PAC & SWA**
  - FY2018

- **Transmission Security**
  - FY2019

- **Mid-Earth Orbit Satellite Transport**
  - FY2018

- **CONUS IP Network Redesign**
  - FY2018
IE TOP Priorities

4 - Satellite Improvements

**UNCLASSIFIED**

**UNITED IN SERVICE TO OUR NATION**

**A-ISR Transport**
- FY2019

**Enhanced Mobile Satellite Services**
- FY2018

**Teleport Generation 3 Phase 2**
- FY2020

**Teleport Generation 3 Phase 3**
- FY2019

**Enterprise SATCOM Gateway Modem**
- FY2020

**MILSATCOM Gateway Right-Sizing**
- FY2021

**SATCOM Gateway Global Broadcast Service (GBS)**
- FY2021

**Global Broadcast Service (GBS) Encryption Implementation**
- FY2018

**Unified Video Dissemination System (UVDS) Enhancements**
- FY2018
IE TOP Priorities
5 – Coalition Information Sharing

Combined Federated Battle Laboratories Network (CFBLNet)
Transition CFBLNet Backbone to CMNT - FY2018
Common NETOPS View - FY2018
Modernize CFBLNet to VDC Mission Enclaves - FY2019

Pegasus
Transition to DISA’s Enterprise Solutions - FY2019
Common NETOPS View - FY2018

UISS-All Partner Access Network (APAN)
FY2018

Virtual Data Center (VDC)
Increase Hardening of VDC Security - FY2018
Rollout Multi-Enclave Client - FY2018
Integrate Global Gray Core into MPGW-X - FY2018
Common NETOPS View - FY2018
Deploy VDC 2.0 - FY2020

CENTRIXS
FY2018
IE TOP Priorities

6 – DISN Technology Refreshment

Domain Name System
FY2018

Internet Access Point
FY2018

Operational Support Services
FY2018

SIPRNET Refresh (Ethernet Security Specification)
FY2018

Secure Communications Interoperability Protocol (SCIP) Gateway
FY2018

Enterprise & Enterprise Classified Voice over IP (VoIP)
FY2018

Voice Internet Service Provider (ISP)
FY2020
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