4th Estate Network Optimization

Many Agencies, One Common Network

Miguel Cerritos - Aracen
Laura Herbertson
Corey Hawkins
Endpoint Services & Customer Support (FE)
27 April 2022

The information provided in this briefing is for general information purposes only. It does not constitute a commitment on behalf of the United States Government to provide any of the capabilities, systems or equipment presented and in no way obligates the United States Government to enter into any future agreements with regard to the same. The information presented may not be disseminated without the express consent of the United States Government.

Miguel Cerritos - Aracen

IT Services Division Chief

Laura Herbertson

Program Manager Division Chief

Corey Hawkins

Global Service Desk Deputy Chief

DISA

WHO WE ARE, WHAT WE DO

OUR MISSION

Serve as a single network with a Single Service Provider (DISA),
to enable cost efficiencies, drive service excellence and mitigate risks.

WHAT WE ASPIRE TO BE

OUR VISION

- Highly functional & scalable network with state of the art architecture
- Digital transformation solutions, ensuring network digital readiness
- Full service, customer-centric common use IT solutions

Defense Enclave Services

Productivity Ubique

4th Estate Network Optimization

Defense Enclave Services

Productivity Ubique

Align 4th Estate Agencies' Common Use IT

Innovate to single service provider for NIPR/SIPR Common Use IT

Strengthen cyber security

Enable Agencies to focus on core competencies

PRIMARY REFORM GOAL

IT consolidation and cost savings to support the Warfighter

Supports up to $2 billion in orders over five years (no annual cap)

- Desktop computers
- EVOIP phones & equipment
- KVMs
- Laptop computers

- Monitors
- Network equipment
- Peripherals
- Servers

- Software
- VTC
- Webcam
- Zero Client

Including:

Successful adaption of innovations considerations

Return on Investment

- We operate in a resource-constrained environment with budgets reduced every year.
- Any capability added to the network cannot add costs. There needs to be a support business case, an offset of costs, or better utilization of resources.

Technology Maturity

- We are a network in sustainment, with no RDT&E budget. New capabilities need to be close to operational, ready to be tested in our production environment.
- Technology insertion must be done through our awarded contracts with our service providers.

DoDNet Migration – Five Phase Process

TRIGGER
Complete Customer Agreement

Site Survey

Design Plan & BOM

Migration IPT/Schedule

| INITIALIZATION | AGENCY / SITE SURVEY | DESIGN IPT | INTEGRATION IPT | EXECUTION |

- **Administrative actions(i.e. scope definition for DoDNet transition)**

- **Agency data collection**
- **Detailed site data (include space, power & cabling assessment)**

- **Collaborative solution design working group**

- **Implementation strategy and priority**
- **ROC drills**
- **Migration schedule**
- **Operational support brief**

- **Agency migration effort**

Key Activities	Key Activities	Key Activities	Key Activities	Key Activities
• Agency agreement meeting • Common Use IT/Mission IT Scope • Data collection	• Site survey assessments • Site remediation (power/space) • Circuit upgrades • Integrated Project Teams (IPT) meetings	• Design IPT meetings & working group • Service design • Application rationalization • Equipment acquisition • MOA formulation	• Migration IPT meetings • Agency personnel transfer • Operational IPT meetings & working group sessions	• Risk mitigation • Endpoint imaging • Migration phases • ASI scheduling
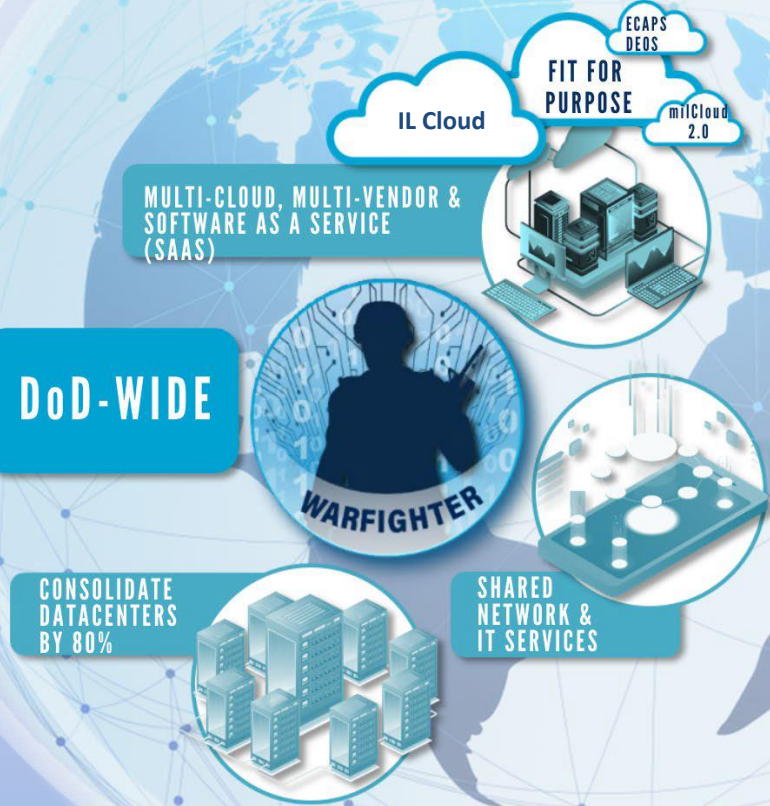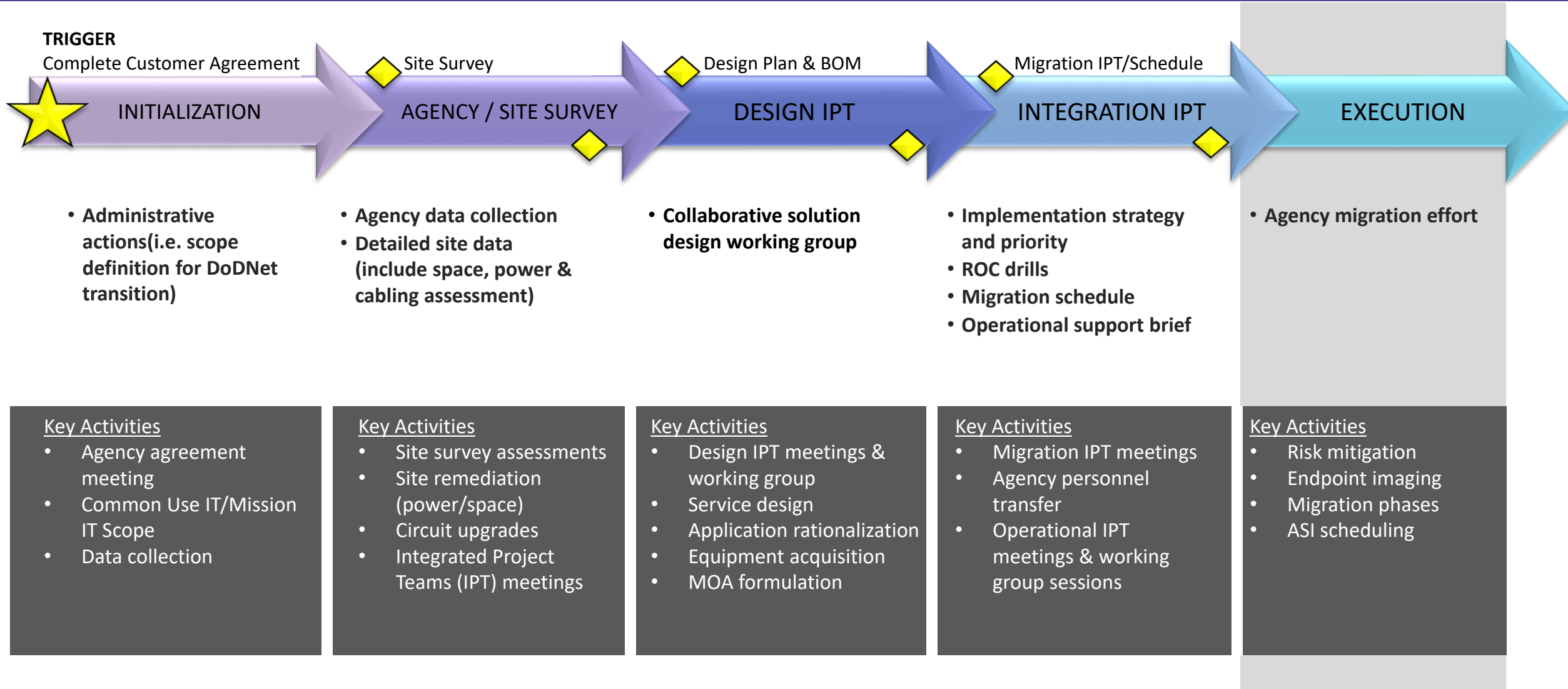
- **Improved customer experience**
  - Transparency- customer can see the status of their tickets on demand
  - Tier 0 Self service – enhanced video interactive experience with one click fixes (automation)
  - Faster restoration times
  - Transparency and informed customers
- **Cost avoidance & operational efficiencies**
  - Service support standardization
  - Customer interactions handled at lowest tier and $$
- **Improved IT services though adoption of industry proven good practices**
  - Align with ITIL and Defense Enterprise Service Management Framework (DESMF)
  - Implement DoD ITSM Enterprise Foundation Data Model (EFDM)
  - Process standardization: Project, Case, Request, Incident, Problem, Change
  - Repeatable outcomes
  - Ability to compare performance to industry

Questions

DEFENSE INFORMATION SYSTEMS AGENCY
The IT Combat Support Agency

/DISA   **@USDISA**   **/USDISA**   **DISA.mil**

BACK UP SLIDES

4ENO Site Surveys and Standards

The 4ENO program conducts physical site surveys at DAFA sites to gather necessary information, such as: assess cable plant compliance with industry/federal/DoD standards, LCR requirements, HVAC/power/rack space to support DoDNet standard equipment, and other infrastructure/network data to plan for DoDNet migration.

Site Survey Report Documents

- Labor/material Bill of Material estimates for remediation work on identified cable plant issues
- Future power needs for DoDNet hardware
- Observations on HVAC and other issues
- A baseline for further analysis and DoDNet design

STANDARDS AND REGULATIONS

- CNSSAM TEMPEST/1-13
- CNSSI No.7003 Protective Distribution Systems (PDS)
- National Electrical Code (NEC)
- National Fire Protection Association (NFPA)
- International Building Code (IBC)
- International Mechanical Code (IMC)
- Institute of Electrical and Electronics Engineers (IEEE)
- American Society for Testing and Materials (ASTM)
- American National Standards Institute (ANSI)
- DISA Facilities Engineering Standards 360-95-3
- DoDNet Requirement - SIPRNet Fiber (No Copper)

Project Kickoff Objectives

WHY ARE WE HERE

GOALS

Engage DAFA & DISA on the Fourth Estate Network Optimization's (4ENO's) effort to consolidate legacy common use Information Technology (IT) services under DISA as a Single-service Provider (SSP).

HOW DO WE APPROACH THIS

PROCESS

Introduce DAFA to the phased DoDNet migration process designed to enable a smooth migration. Capture the exit and entry criteria per the initiation, planning, execution, and close-out phases. Discuss and develop IPT and collaboration methods, processes, and population of supporting artifacts/documents.
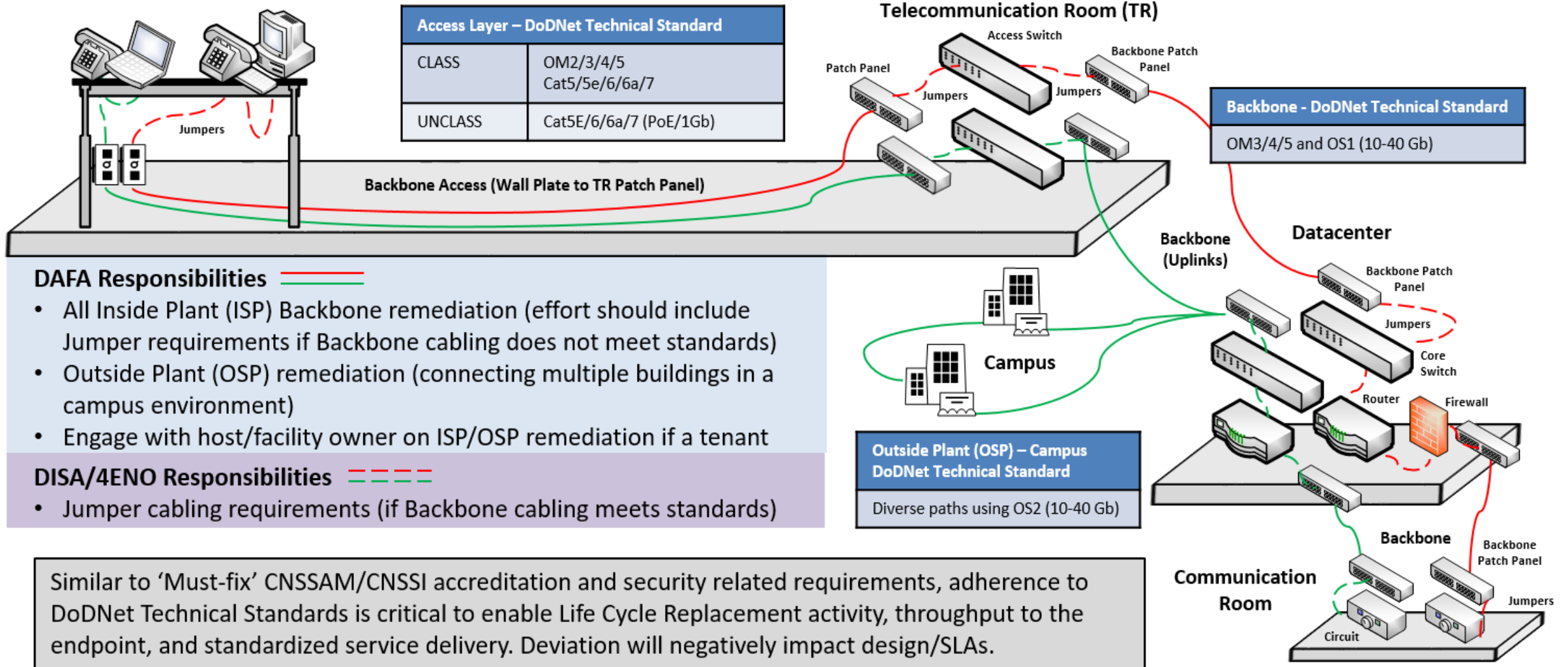
HERE'S WHAT'S NEXT

WAY-AHEAD

Establish IPTS, its members, and battle rhythms. Assess immediate project migration priorities and requirements. Determine schedules, milestones, WBS, and critical path.

Access Layer – DoDNet Technical Standard	
CLASS	OM2/3/4/5 Cat5/5e/6/6a/7
UNCLASS	Cat5E/6/6a/7 (PoE/1Gb)

Telecommunication Room (TR)

Access Switch

Backbone Patch Panel

Patch Panel

Jumpers

Jumpers

Backbone - DoDNet Technical Standard

OM3/4/5 and OS1 (10-40 Gb)

Backbone Access (Wall Plate to TR Patch Panel)

Backbone (Uplinks)

Datacenter

Backbone Patch Panel

Jumpers

Core Switch

Router   Firewall

Campus

Outside Plant (OSP) – Campus DoDNet Technical Standard

Diverse paths using OS2 (10-40 Gb)

Backbone

Backbone Patch Panel

Communication Room

Jumpers

Circuit

DAFA Responsibilities ———— ————
- All Inside Plant (ISP) Backbone remediation (effort should include Jumper requirements if Backbone cabling does not meet standards)
- Outside Plant (OSP) remediation (connecting multiple buildings in a campus environment)
- Engage with host/facility owner on ISP/OSP remediation if a tenant

DISA/4ENO Responsibilities – – – – – – – –
- Jumper cabling requirements (if Backbone cabling meets standards)

Similar to 'Must-fix' CNSSAM/CNSSI accreditation and security related requirements, adherence to DoDNet Technical Standards is critical to enable Life Cycle Replacement activity, throughput to the endpoint, and standardized service delivery. Deviation will negatively impact design/SLAs.

Simplified network/cable plant diagram for illustration purposes only