

# DISN Secure Systems Engineering & Support



## Capabilities Enhancement Defense Information Systems Network

By Light delivers quality engineering and technical support, services, and products globally and regionally for the DISA Infrastructure Directorate and DISA mission partners. We use streamlined processes for a wide variety of critical IT engineering performance-based support and services.

We provide lifecycle engineering, testing, and technical support for the current and evolving DISN architecture including optical transport, software defined networking, timing and synchronization, IP infrastructure, satellite communications, and cryptographic systems.

We promote development of emerging technologies and innovative services at a much faster pace than ever before to support the warfighter.

We implement the “Align,” “Converge”, and “Modernize” evolution strategy in moving from circuit-based strategies to Everything over IP (EoIP). This seamlessly integrates terrestrial and satellite transport minimizing future system complexity.

By Light Improves testing agility, timeliness, and cost in an increasingly complex DISN environment.



**Defense Information Systems Agency**  
IDIQ – GSM-ETI | 05/2019 – Present

By Light Headquarters  
8484 Westpark Dr., Ste. 600, McLean, VA 22102  
703.224.1000 | [www.bylight.com](http://www.bylight.com)

# DISN SECURE SYSTEMS ENGINEERING & SUPPORT

## SPECIFIC TASK HIGHLIGHTS

- Support the technical planning, analysis, assessment, design, development, systems integration and installation, configuration, testing, evaluation, troubleshooting and repair, sustainment, special/trade-study, technical recommendations, and regulatory compliance of the DISN architecture.
- Provide engineering support for all elements, layers, and gateways of the DISN infrastructure, to include an Internet Protocol (IP)-based routing and 100 Gbps and beyond optical infrastructure leveraging encryption over terrestrial and undersea fiber optic networks as well as military and commercial satellite communications.
- Evaluate Software Defined Networking (SDN) products to automate operations of the network and optimize operations in all theaters.
- Implement lab automation approach that reduces test times by 70%, improves lab process, streamlines workload, and manages contention between the pool of testers and infrastructure.
- Develop a standardized, more secure, cost-effective timing and synchronization System Capability.
- Deliver capacity planning assessments and end-to-end engineering to integrate the DISN SATCOM components to drive the development of future satellite constellations and support operational planning.
- Partner with Joint Regional Security Stack program to integrate the Joint Based Customer Edge Routers into the DISA's MPLS environment.
- Perform engineering trade studies and design in support of the Universal Gateway, converging terrestrial, mobile, and satellite communications services (voice, video and data) to all DoDIN customers incorporating new Commercial Solutions for Classified (CSfC) capabilities.
- Test, assess, certify, implement, operate, and maintain Type 1 inline network, High Assurance Internet Protocol (HAiPE), Ethernet, and Type 3 encryptors.
- Support mission partners to satisfy their interoperability requirements.
- Provide Tier-3 support, including after-hours on-call support for the operational network and theater Network Operational Center (NOC) escalation support.

