DoD Information Network (DoDIN)

Proficiency Code: A

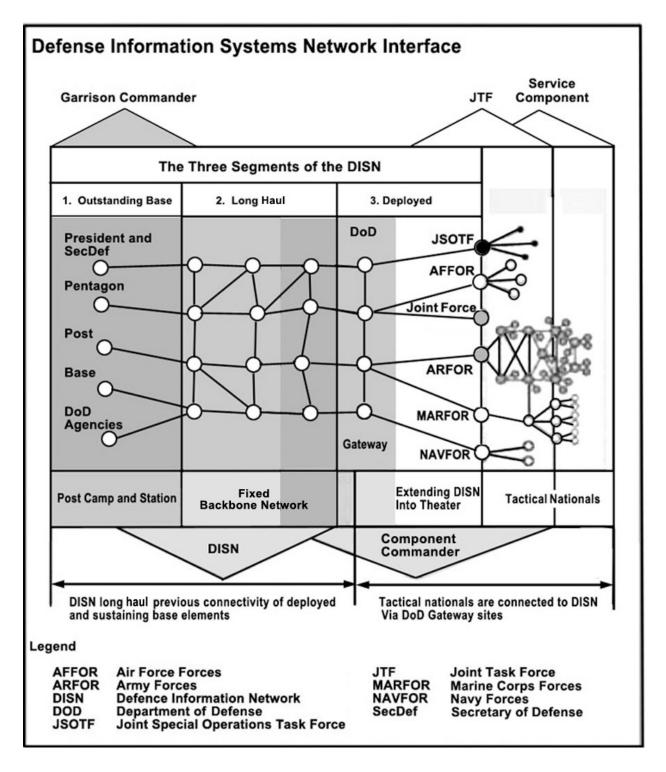
The globally interconnected, end-to-end set of information capabilities, associated processes, and personnel for collecting, processing, storing, disseminating and managing information on demand to warfighters, policy makers, and support personnel. The DoDIN includes all owned and leased communications and computing systems and services, software (including applications), data, security services, and other associated services necessary to achieve information superiority. The DoDIN supports the Department of Defense, National Security, and related Intelligence community missions and functions (strategic, operational, tactical, and business), in war and in peace. The DoDIN provides capabilities from all operating locations (bases, posts, camps, stations, facilities, mobile platforms, and deployed sites). The DoDIN provides interfaces to coalition, allied, and non-DoD users and systems.

Services: DODIN consists of several components that provide key services. They are access, transport, application, voice, video, satellite communications, and aerial layer services. Let us begin with the access services.

Access services of the DODIN divides into two elements; the Defense Information Systems Network Interface (DISN) and the DOD Gateway.

The DISN is the major element of the DoDIN (fig. 3–3). The DISN has three segments: sustaining base, long haul, and deployed. The DISN is DoD's worldwide enterprise-level telecommunications infrastructure providing end-to-end information transfer for supporting military operations. For the most part, it is transparent to the joint force. The DISN facilitates the management of information resources and is responsive to national security, as well as DoD needs. It provides basic DoDIN services to DoD installations and deployed forces. Those services include voice, data, and video, as well as ancillary enterprise services such as directories and messaging. DoD policy mandates the use of the DISN for wide area and metropolitan networks.

Department of Defense Gateway: In concert with military and commercial communication segments that support DoD missions, the primary interface point between the sustaining base and deployed forces is the DoD Gateway. The DoD Gateway may include the standardized tactical entry point and upgrades called the Teleport and the Modernization of Enterprise Terminal programs. The DoD Gateway provides robust worldwide ground entry interface to SATCOM resources and DISN services. The design of the DoD Gateway meets the requirement of the provisioning of pre-positioned, sustainable DISN services. An equally important result of this upgrade to the DISN has been the improvement and standardization (facilitating interoperability) of the JFC's access to the DISN.

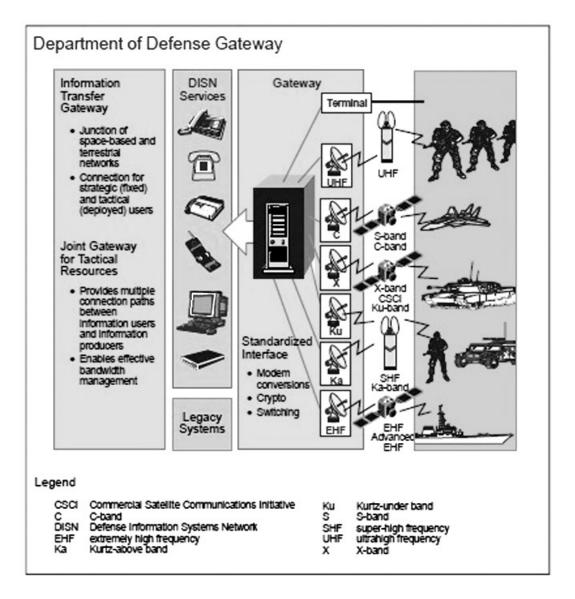


The DoD Gateway program enhances the ability of the DISN to respond to the needs of the joint force. Joint and service-level operational users rely on both military and commercial SATCOM systems to support their communications requirements. The DoD Gateway provides predefined support packages on a predefined timeline. This support extends via common user transports and includes voice, data, and video services. These services extend directly to deployed naval forces and to each component of a Joint Task Force (JTF), if employed. Voice services include access

to the Defense Switched Network (DSN) and the Defense Red Switched Network (DRSN). Data will include access to the Secret Internet Protocol Router Network (SIPRNET) and the Non-Secure Internet Protocol Router Network (NIPRNET). Video services include access to DISN video services. It will also support the Joint Worldwide Intelligence Communications System (JWICS), a Secret Compartmentalized Information (SCI)-level data, voice, and video services network.

Although implemented globally, the DoD Gateway is under a single executive agent. Joint Force Commanders (JFCs) and their staffs play an important role in DoD Gateway employment. The tactical communications system planners coordinate entry point access and procedures. DISA plays a major role in the planning process and utilizes regional contingency exercise planning branches, the United States Cyber Command (USCYBERCOM)-operated Joint Operations Center and DISA's DoDIN operations center to facilitate that interaction with the joint force. DoD Gateway has evolved to incorporate satellite connectivity through the Teleport program. This provides greater flexibility in the use of DoD and commercial SATCOM resources. Flexibility does not imply additional bandwidth for the deployed joint force. However, use of quad-band terminals provides the joint force with more flexible means of SATCOM support.

The DoD Teleport Program is an upgrade of satellite telecommunication capabilities at selected DoD gateways to improve DISN service access to the deployed joint force.



Voice services

- Defense Switched Network.
- Defense Red Switched Network.
- Enhanced Mobile Satellite Services.
- Tactical Voice.
- Voice over Internet Protocol and Voice over Secure Internet Protocol services.

Transport services

DODIN transport services include the following items discussed later in further detail.

• NIPRNET.

- SIPRNET.
- JWICS.
- Multi-national Wide Area Network (WAN), which is an information network supporting the multi-national operations that may be unclassified or classified.

The Joint Data Network (JDN) carries tactical data link (TDL) and multi-sensor early warning information in support of joint operations. Information passes over the JDN in near real time. The JDN consists of the multi-TDL network, ground network, intelligence network, and sensor network along with other feeds. Effective design and implementation of the multi-TDL network are critical in managing complexities to improve the JFC's ability to engage hostile forces and prevent friendly fire.

Applications

The Global Command and Control System-Joint (GCCS-J), the Theater Battle Management Core Systems (TBMCS), the Army Battle Command System, DoD enterprise collaboration service, and the Automated Message Handling System (AMHS) discussed are illustrative of applications incorporated into the DODIN.

Video services

Video services include the defense Video Teleconference (VTC) system, the Secret Compartmentalized Information VTC system, and commercial news feed capability.

Defense video teleconferencing system—Global

The defense VTC system–global is a classified, closed video network capable of voice, image, and data exchange supporting command and control (C2) functions of DoD. It utilizes industry standard technology for robust interoperability to commercial systems as well as legacy DoD systems.

Secret Compartmentalized Information-level video teleconferencing

The SCI-level VTC system is a classified, closed video network capable of voice, image, and data exchange supporting intelligence and C2 functions of DoD.

NOTE: The JWICS network typically carries the SCI VTC data.

Commercial news feed

Commercial news feeds may be rebroadcast over DOD communications systems or received via a commercially leased terminal in support of C2 functions.

Satellite communication

SATCOM is a critical segment of the DoDIN that provides the ability to establish or augment the communications system in regions of the world that lack suitable terrestrial infrastructure, such as polar regions, open ocean, and remote areas of the world.

Aerial layer

The aerial layer provides additional communications capacity by using manned and unmanned systems to host communications packages for continuous communications coverage of large geographic areas. The aerial layer integrates with the space a terrestrial network segments to enable advanced information exchange capabilities.