Marine Corps Enterprise Network (MCEN)

What is it?

C4 SHALL The MCEN is the Marine Corps' network-of-networks and approved interconnected network segments. It comprises people, processes, logical and physical infrastructure, architecture, topology and Cyberspace Operations. The MCEN is characterized at a minimum to include Programs of Record that provide network services to forward deployed forces operating in the USMC.mil namespace and in USMC routable IP addresses; and Operations and Maintenance functions that provision data transportation, enterprise IT, network services, and boundary defense. The MCEN's physical infrastructure is analogous to the Defense Information System Network (DISN), and the Local Exchange Carrier (LEC), as it enables the Marine Corps Information Technology Environment (MCITE) and the flow of data, information, and knowledge across the Marine Corps Information Environment (MCIE). The MCEN interfaces with external networks to provide information and resource sharing, as well as access to external services.

Why is it important for the Marine Corps?

The MCEN provides robust, seamless and secure end-to-end communications – from the supporting establishment to our forward deployed forces. The MCEN, through our regionalized management construct, delivers enterprise services across the institution. We must enhance our MCEN to better serve our Operational Forward Deployed Forces by improving our seamlessness, reachback, interoperability, and security to the Base/Post/Station enclaves and leveraging our Enterprise IT services. This is accomplished via multiple transport layers, flexible adaptive networks that extend to our Amphib C4 presence.

What is the current status?

The Marine Corps is currently investing in and expanding the Secure Internet Protocol Routing Network (SIPRNET) and transitioning from Navy Marine Corps Internet (NMCI) garrison unclassified Non-Secure Internet Protocol Routing Network (NIPRNET) to Next Generation Enterprise Network (NGEN). Aligned as the top layer of a defense-in-depth strategy, the MCNOSC manages Computer Network Defense (CND) through oversight and coordination with four Regional Network Operations and Security Centers (RNOSCs) and eight Marine Air Ground Task Force Information Technology Support Centers (MITSCs). The RNOSCs and MITSCs, embedded within Marine Corps commands provide regional and local commanders maximum network flexibility and responsiveness to operational requirements.

What is next?

The Marine Corps continues to improve its ability to employ rapid proliferation of new information technologies and their infusion into the MCEN in order to ensure our networks meet commanders' emerging requirements, remain efficient and cost effective, and enhance security in support of Marine Corps, joint, and coalition interoperability. The Marine Corps continues to examine promising technologies and operational techniques for use throughout the MCEN. Over the FYDP, the Marine Corps will realize full capabilities within key MCEN programs such as the Marine Corps Enterprise Information Technology Services (MCEITS), NGEN, Secure Operational Infrastructure and Communications (SONIC), as well as new technologies such as Smart Phones, bandwidth elasticity enabled by Dense Wave Division Multiplexing (DWDM), Gigabit Passive Optical Network (GPON), cross-domain solutions with partners, and cloud implementation.