

ART 4.5.2 Enable Logistics

Construct and maintain land, water, and air routes that connect an operating military force with one or more bases of operations and along which supplies and reinforcements move. Sustainment lines of communications include main and alternate supply routes. (FM 3-34.400) (USAES)

NO.	Scale	Measure
01	Yes/No	An inability to use lines of communications located in the area of operations (AO) did not degrade or delay unit operations.
02	Yes/No	Unit developed detailed plans for project.
03	Yes/No	Unit inspected project for quality control and ensured that the project was completed on time.
04	Yes/No	Environmental considerations planning and procedures were present and being followed.
05	Time	To reconnoiter to determine how the local environment will affect construction and if existing facilities or natural resources are available near the construction or maintenance site. This includes determining terrain features and their effect on the project; environmental considerations; problems involved in traveling to and from work site; what will be needed to keep the job site drained before, during, and after construction; and soil type and effort required to allow vehicle traffic and construction.
06	Time	To coordinate additional personnel, equipment, and critical items.
07	Time	To review available information in construction directive, intelligence reports, and site investigation to develop an operation plan or order.
08	Time	To plan the project including construction estimate, construction directive, and quality control.
09	Time	To prepare construction estimate including preparing a project activity list and a construction sequencing network; preparing materials, equipment, and personnel

		estimates; determining activity work rates; and preparing critical path.
10	Time	To prepare construction directive and issue it to construction unit. Directive states the exact assignment, project location, and start and completion times; specifies additional personnel, equipment, and materials available; prioritizes the entire project; and specifies type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
11	Time	To monitor construction and perform quality assurance inspections.
12	Time	To perform final inspection of finished construction and turn it over to the user.
13	Time	To construct and maintain sustainment lines of communications.
14	Time	That scheduled arrivals in AO are delayed due to interruption in lines of communication (on average).
15	Percent	Of difference between planned and actual requirements for lines of communications construction and maintenance requirements.
16	Percent	Of force becoming casualties due to enemy action or accidents during construction or repair.
17	Percent	Increase in the carrying capability of the lines of communications due to construction or maintenance of the lines of communications.
18	Percent	Of planned general engineering capability performed in AO.
19	Percent	Of personnel in AO required for building and maintaining lines of communications.
20	Percent	Of general engineering support provided by host nation.
21	Number	Of lines of communications requiring construction or maintenance in AO.
22	Number	Of instances of delays in scheduled arrivals due to interruption of lines of communications.

Supporting Collective Tasks:

Task No.	Title	Proponent	Echelon
05-3-5106	Install a Culvert	05 - Engineers (Collective)	Platoon
05-3-5108	Perform Clearing, Grubbing, and Stripping Operations	05 - Engineers (Collective)	Platoon
05-3-5111	Conduct Compaction Operations	05 - Engineers (Collective)	Platoon
05-3-5113	Conduct Cut/Fill Operations	05 - Engineers (Collective)	Platoon
05-3-5115	Conduct Dust Control Operations	05 - Engineers (Collective)	Platoon
05-3-5119	Conduct Surface Treatment Operations	05 - Engineers (Collective)	Platoon
05-3-5121	Set Up Asphalt Plant Equipment	05 - Engineers (Collective)	Platoon
05-3-5122	Apply a Tack Coat on a Prepared Surface	05 - Engineers (Collective)	Platoon
05-3-5123	Apply a Prime Coat on a Prepared Surface	05 - Engineers (Collective)	Platoon
05-3-5124	Conduct Asphalt Operations	05 - Engineers (Collective)	Platoon
05-3-5201	Construct a Bridge Abutment	05 - Engineers (Collective)	Platoon
05-3-5202	Reinforce a Existing Bridge	05 - Engineers (Collective)	Platoon
05-3-5210	Construct a Sewerage System	05 - Engineers (Collective)	Platoon
05-3-5211	Construct a Water Distribution System	05 - Engineers (Collective)	Platoon
05-3-5212	Construct Electrical Utilities	05 - Engineers (Collective)	Platoon
05-3-5215	Install a Coupled Pipeline	05 - Engineers (Collective)	Platoon
05-3-5220	Construct a Wood Frame Structure	05 - Engineers (Collective)	Platoon
05-3-5222	Construct a Steel-Frame Pre-engineered Structure	05 - Engineers (Collective)	Platoon

05-3-5231	Replace Damaged Airfield Matting	05 - Engineers (Collective)	Platoon
05-6-0007	Plan for Construction of Sustainment Lines of Communication (LOC) Systems	05 - Engineers (Collective)	Brigade
07-5-1607	Prepare a Base Radio Station for Operation	07 - Infantry (Collective)	Team (TOE)
17-5-0011	Establish Communications	17 - Armor (Collective)	Team (TOE)
63-7-2203	Establish Liaisons	63 - Multifunctional Logistics (Collective)	Division (TOE)
63-9-1016	Establish Communications (Battalion-Echelons Above Corps)	63 - Multifunctional Logistics (Collective)	Echelons Above Corps
71-9-6540	Protect Air, Land, and Sea Lines of Communication (Division Echelon and Above [Operational])	71 - Combined Arms (Collective)	Echelons Above Corps