

ART 4.5.2.3 Construct Ports

Construct and rehabilitate ship unloading and cargo handling facilities in the area of operations (AO). Repair and maintenance can include emergency repair, major repair, rehabilitation of breakwater structures, and expedients. (FM 5-480) (USAES)

NO.	Scale	Measure
01	Yes/No	An inability to construct or maintain seaport facilities within the time the construction directive specifies did not degrade or delay unit operations.
02	Yes/No	Unit developed detailed plans for project.
03	Yes/No	Unit inspected seaport projects for quality control and ensured the project was completed on time.
04	Yes/No	Environmental considerations planning and procedures were present and being followed.
05	Time	To review available information in construction directive, intelligence reports, and site investigation to develop an operation plan or order.
06	Time	To plan the seaport construction project. This includes construction estimate, construction directive, and quality control.
07	Time	To reconnoiter to determine how the local environment will affect the construction and maintenance of seaports. This includes determining if existing facilities or natural resources are available near the work site; terrain features and their effects 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.
08	Time	To coordinate additional personnel, equipment, and critical items.

09	Time	To monitor construction and perform quality assurance inspections.
10	Time	To perform final inspection of finished seaport and turn it over to the user.
11	Time	For building and maintaining port facilities.
12	Time	To prepare a construction estimate for the seaport. This includes preparing a project activity list and a construction sequencing network; preparing material, equipment, and personnel estimates; determining work rates for activities; and preparing critical path.
13	Time	To prepare construction directive for the seaport and issue it to the construction unit. This 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.
14	Percent	Of difference between planned and actual requirements for the construction or maintenance of port facilities in the AO.
15	Percent	Of force that become casualties due to enemy action or accidents during the construction or maintenance of port facilities.
16	Percent	Of increase in the throughput capability of a surface port due to the construction or maintenance of port facilities.
17	Percent	Of planned construction or maintenance capability for port facilities completed in AO.
18	Percent	Of personnel in AO required for building and maintaining port facilities.
19	Percent	Of port construction or repair capability provided by host nation
20	Percent	Of existing port facilities improved in AO.
21	Percent	Of port facilities in AO that can be used in their current condition.

22	Percent	Of unit operations degraded, delayed, or modified in AO due to an inability to use existing port facilities.
23	Percent	Of port facilities in the AO damaged by enemy fire or natural disaster.
24	Percent	Of existing logistic port facilities connected to existing roads, pipelines, or railroads.
25	Percent	Of supplies lost or destroyed during logistic offload activities in the AO.
26	Percent	Of underwater habitat destroyed.
27	Number	Of port facilities in the AO requiring construction or maintenance.
28	Number	And types of port facilities—such as piers, causeways, cranes, and marshaling or storage sites—constructed or improved in the AO.
29	Number	And types of port facilities in the AO damaged by enemy fire or natural disaster.
30	Number	Of meters of breakwater, piers, and causeways, constructed or improved in the AO within a given time.
31	Number	Of port facility inspections performed per month in the AO.
32	Number	Of instances of delays in scheduled arrivals due to the destruction or damage of port facilities in the AO by combat actions or natural disaster.
33	Number	Of instances in which troop movement or sustaining operations were prevented due to an inability to use port facilities.

Supporting Collective Tasks:

Task No.	Title	Proponent	Echelon
05-2-5802	Construct Onshore Mooring Anchors	05 - Engineers (Collective)	Company
05-2-5803	Construct a Landing Craft Ramp	05 - Engineers (Collective)	Company

05-2-5804	Construct Rock-Filled Cribs	05 - Engineers (Collective)	Company
05-2-5805	Construct Timber Pile Dolphins	05 - Engineers (Collective)	Company
05-2-5806	Construct Timber Pile Wharves	05 - Engineers (Collective)	Company
05-2-5807	Install Fender Piles	05 - Engineers (Collective)	Company
05-2-5808	Install Mooring Piles	05 - Engineers (Collective)	Company
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
05-3-5220	Construct a Wood Frame Structure	05 - Engineers (Collective)	Platoon
05-3-5222	Construct a Steel-Frame Pre-engineered Structure	05 - Engineers (Collective)	Platoon
05-3-5801	Construct Harbor Craft Repair Facilities	05 - Engineers (Collective)	Platoon
05-5-5555	Install Conventional Underwater Anchor System	05 - Engineers (Collective)	Team (TOE)