

Command and Control Integration (CCI)

Purpose: To develop an advanced, object-oriented database and multi-system translator that enhances the commander's ability to make decisions and manage the battlespace by providing the capability to synchronize data across the currently fielded command and control systems within the maneuver, intelligence and fire support functional areas.

Background: Existing Marine Corps C4ISR architecture systems are not designed to present a consistent Common Tactical Picture (CTP). Maneuver, intelligence and fire support applications are not synchronized and there is no common source of trusted battlefield information. Therefore, the information portrayed in combat operations centers is often inconsistent, suffers from dissimilar timing delays, and there is no uniform method to allocate network resources across the applications. The lack of a reliable CTP that can be accessed by tactical units at the infantry regiment level and below, over the existing communications paths, is a significant shortcoming that CCI proposes to address.

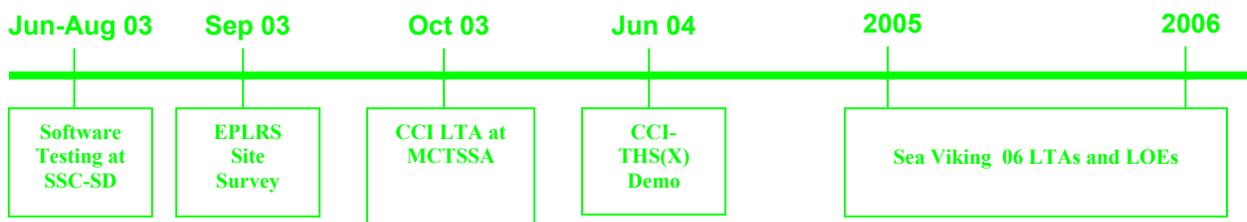


Description: The principal components of CCI include:

- An internal Object Model created in UML of all battlefield entities such as friendly and enemy assets, overlays, and operational events.
- Object serving communication software (Shared Net) that provides facilities for object subscription as well as replication and synchronization.
- The Shared Net Object Instance Store, a single software package that integrates the object model within the communication services framework.
- The CCI Translator, which provides transparent, bi-directional translation with existing systems into common object format.
- The CCI-C2PC interface consists of “under the hood” work to make C2PC a Shared Net client. The current architecture maintains use of the C2PC gateway.

Deliverable Products: The Lab is working with Marine Corps Systems Command to transition selected CCI components in 2005. Assessment reports.

Milestones:



Action Officer: 784-1331