

Military Eyes Battlefield Software for Combat Edge

By DAVID GREENBERG

Staff Reporter

The U.S. Army is fast-tracking development of software by a small Santa Monica company that could revolutionize the way soldiers make decisions both on and off the battlefield.

Intelligent Systems Technology Inc. has moved into the advanced development stage for its "Knowport" system, which would quickly access and scan mountains of data, retrieving only information relevant to soldiers' particular needs at a certain time. That includes tapping into the strategies used in previous battles.

Currently, commanders and their staffs can spend days sifting through piles of documents to locate the information they need in planning battle strategies.

"Certainly to a degree, it changes the way battles are fought," said Philip Coyle, senior advisor with the Center for Defense Information. "It's at the heart of what the Army is trying to do."

Although the Army fast-tracked the Intelligent Systems contract before Sept. 11, military and company officials said the terrorist attacks and resulting U.S. military action in Afghanistan underscored the need for the technology.

There also are plans for commercial applications of the software that could ultimately provide hundreds of millions of dollars for the firm and create hundreds of jobs.

Commercial applications of the Knowport system would include giving firefighters instant access to layouts of buildings and evacuation planning, as well as customer relations and supply chain management.

Military technology generally takes a decade or more from preliminary development to application stages. But prototypes of the Knowport system could be in limited use by the Army within a year, with full application as early as 2004. The system would be used in command centers, ships, aircraft, ground vehicles and laptop computers.

"This is the most promising (program) that we have seen," said Dirk Klose, technical advisor for the Communications Electronic Command (CECOM), the Army's Fort Monmouth, N.J.-based research and development center. "Information supremacy is a key tenant in winning battles. If I can get the information quick enough and act before the enemy, than I will win the war."

Classified work

Much of Knowport's applications and linkages remain classified, said Army officials.

Intelligent Systems is expected to receive \$700,000 from the 2002 defense budget for continued development, which is now in the hands of seven of the company's engineers. The Defense Advance Research Projects Agency, which funds and oversees research and development of projects for all military branches, is expected to invest an additional \$400,000 in the company soon, Army officials said.

Privately held Intelligent Systems was recently selected over **Charles River Analytics Inc.** of Cambridge, Mass., and **International Electronic Machines Corp.** of Albany, N.Y., to move into the advanced development phase for its system.

"We expect to grow Knowport as a whole

business area," said Azad Madni, chief executive of Intelligent Systems. "We are in a position to win additional sizeable contracts in this arena."

The Army's contract with Intelligent Systems springs from a program called Objective Force that the military introduced in 1999 detailing plans to build brigades using fewer troops and lighter, more agile weapons and vehicles that can be deployed anywhere in the world within 96 hours. Currently, it can take weeks to deploy troops to a region.

An integral part of the modernization plan revolves around more sophisticated computer software in military vehicles and planes. Such software would allow military planes, for instance, to access geographic and weather conditions instantly and plan accordingly while en route to a battle zone.

"It is a complete change not only in the weapons systems but in the way we look at the military," said Lt. Col. George Krivo, a public affairs officer at the Pentagon's Objective Force office.

Knowport is an offshoot of two technologies that Intelligent Systems has been developing since the company formed in 1994.

Its ProcessEdge, a Java-based software made available in 2000, allows military and commercial project managers to design and manage their business and technical operations more efficiently. TeamEdge, which will be made available to the public this summer, is a Web-based platform for managing work when one or more companies are collaborating on a project.



Intelligent: Retrieving relevant data.