



# Croatia Looks Beyond Afghanistan Kit

SDT Sustav is developing a soldier modernisation suite to demonstrate the potential capabilities of such a programme as Croatia begins to consider its own programme

**SDT Sustav began its work in C4I in the early 1990s with the ArtSys2000 system for the Croatian armed forces, a functional model for an artillery Fire Control System (FCS) for forward observers with the key element being a weapons display unit which utilised real time differential GPS to enhance accuracy.**

Stjepan Adrinek, General Manager at SDT Sustav explained, "At the that time, selective availability was imposed, so ordinary GPS used to have a 50-200m accuracy with only NATO having precision with a single GPS at 15m. However, with ArtSys2000 we achieved 1-2m in real time."

Later, the company developed and fielded with the Croatian army a stand alone mortar FCS which utilised an in-house mapping and GIS module. The firm is currently developing the Battle Management System known as BMVIS for use with Croatia's AMV and MBT fleets and will integrate to provide an integration interface with the SMP system it is developing.

Adrinek said that there was currently no Croatian SMP requirement yet but he believes that exposure to similar systems by Croatian forces overseas in operations in Afghanistan or in international peacekeeping operations will lead to a clamour for their own system.

SDT Sustav are currently working with a number of potential suppliers including Itronics rugged computers, the TDS Nomad and Liteye head mounted display. SDT Sustav's intention is to undertake a demonstration as

early as spring 2010.

For the proof of concept stage, SDT have used commercial devices with Adrinek saying that his basic requirements have been GPS, WiFi, Bluetooth, rugged mouse and video output to a head up display. The company believe that if sufficient numbers of system are ordered this could result in the firm developing and producing its own rugged computer.

An area in which they don't intend to produce a device is in the communications field. Adrinek said, "We need a network, a personal role radio. When I developed the suite for field applications I used WiFi but I will invite companies to connect with my computer. The only requirement for the radio is that the device accepts TCP/IP protocols and nothing more."

A typical Croatian squad is typically ten strong although this can vary from eight to as many as twenty. Any soldier network will have to link into Croatia's current Combat Net Radio solution, the VHF SINGARS ATCS and Spearhead radios. BMVIS comes down over VHF to the commander screen and then software will distribute this to others over a soldier network.

Adrinek said, "Through our applications you have map on the screen, you see all the members of your team in real time. Everyone in the squad has a screen. However, the commander decides if each soldier can see his position, he is the boss. They can exchange text messages and will each have the same tactical security. The network is high speed, so the next step is very soon

VoIP and exchange of video, so you can look around corners and even shoot."

To meet current near term personal role radio requirement, Croatian forces deployed to Afghanistan are equipped with Motorola GP300 radios. From late 2008, the RIZ company have provided throat mikes in support of troops Afghanistan.

Ballistic protection is provided by Kroko's M120 Combat Ballistic Vest which proves protection at NIJ III-A upgradeable to IV with side protection plates. Other protection elements include the ESS Interchangeable Component EYESHIELD. Sestan Busch have provided their BK-3 combat helmet with 30,000 delivered since 2002. The same helmet has been selected by Italy for its Soldato Futuro programme with further 100,000 helmets ordered by Saudi Arabia and another 40,000 by the UAE.

Croatia is also in the process of fielding a new camouflage pattern using IR resistant materials with work beginning in 2003. Croatia's new assault rifle, the bullpup 5.56x45mm VHS assault rifle is also entering service. VHS prototypes passed trials in Spring 2009 with an order following for an initial 1000 weapons' with a further order for 16,000 weapons expected to follow by the end of 2009. The weapon has already been deployed with Croat forces deployed on UN operations to the Golan. Trials to determine a new Underbarrel Grenade Launcher are continuing as is a decision on a new weapon sight originally scheduled to be made from 2008. ■