NORMANS
Company trial update

Rune Lausund, Programme Manager for NORMANS at the FFI outlines preparations for key trials due for the end of the year

In UK procurement terms, Norway's NORMANS or NORwegian Modular Arctic Network Soldier is in its Assessment Phase. Today the next step is working toward company level trials or NORMANS Companisett (Kp), scheduled for October in the south of the country. This will serve as an Integrated Test Evaluation and Acceptance test of what has been done thus far, as a major milestone toward procurement.

Rune Lausund, Programme Manager for NORMANS at FFI, Norway's government defence research organisation said, "We are doing the things that we need to do for national integration but we need to base that on international solutions. That brings us to the very important issue of interoperability. We also need that because when we participate internationally we always work together with allies."

The FFI's recommendation is to pursue an evolutionary approach in NORMANS which is reflected in the programme's history of C4I testing. Lausund however cautions that, "Whenever we procure components, they should be looking at long term specific goals." The first such 'C4I' module was acquired in 2008 and comprised Harris RF-7800S-TR radio and the Nacre QuietPro headset with the findings for this procurement coming out of work undertaken in 2002-3, which showed that every rifleman needed a voice and data radio and a hearing protection system.

The next tranche of trials took place in late 2006 which looked at two variants of the C2 systems, the hand held or wrist mounted NORMANS light for individual soldiers and the larger screened NORMANS advanced for commanders. Lausund said, "It is a very light system on the individual with more advanced systems on the commander as well as those individuals whose role in the system requires more functionality than an ordinary rifleman. We have looked at a legacy systems with lots of functionality, and less advanced systems, trying to quantify what is the sense of bringing systems into the unit and individual."

NORMANS however is much more than C4I, covering all the five areas that are defined by NATO and also covers Training and Tactics, Techniques and Procedures. The FFI have also undertaken research on lightweight ceramic body armour. The Ministry of Defence has also acquired new weapons, the H&K 416 and the MP-7 with the FFI undertaking research on the ammunition.

The units the FFI have hitherto been working with have been up to platoon level. Lausund said, "This year, we are bringing it into a larger company trial within the digitized battalion system. We have had a battalion working together with us, also working with users who had been in Afghanistan and are going back to Afghanistan. They are bringing a lot of very good information to the developers."

The C4I philosophy of the NORMANS Kp is that the section and fire team commander are nodes in the BMS network, with different applications used at the soldier and vehicle nodes, balanced by a common data model and message handling system. Norway has adopted a future architecture based on an IP structure as a means to bring in legacy systems.

The User's Single Statement of Need (SSON) for the C4I element of NORMANS is: "The User requires the capability to Command, Control and exploit Information at all levels within the battle group in a Network Enabled Capability environment." Lausund said, "Interaction with soldier systems and vehicle BMS is an area I believe is very important and something we need to focus on. The SSON can't be achieved from the soldier perspective only. In most operations our soldiers are in some sort of mechanised unit. The vehicles need to have a link between the vehicle systems and the soldier system."

Norway will implement a range of Alliance interoperability measures including the STANAG 4406 Message Handling Systems and the JC3IEDM via the MIP. It is also currently actively participating in the development of annexes to existing STANAGS.

Contracts to support NORMANS Kp were let in August 2008. The industry teams are based around partnerships in four key areas with overall project management under the aegis of FFI and SDE, the C4I area and software integration with Thales Norway as prime supported by Kongsberg and Teleplan, Clothing and Protection led by NFM as prime and Cato Ringstad and K Stormark. Hardware integration at joint level is the responsibility of a team of Thales, Kongsberg and NFM.

As part of the de-risking process, a section level de-risking trial was scheduled for May part of progressive trails that will take place through the year culminating in the company trial in October. These will comprise sub system and technical testing, measures of performance, measures of Effect (MOE) and Mission MOE.

THE FUTURE

In its very acronym, NORMANS self evidently addresses the need to operate in extreme cold. Winter however, Lausund explained, isn't what it used to be. He recalled that in January this year the temperature in northern Norway ranged from around +7C down to -30C and while on the coast temperatures could be at zero, just 6-8Km inland these dropped to as low as -25C. Lausund believes that it would be worthwhile to look at whether modern displays would now operate in the North. Another area Lausund believes would be worthwhile revisiting is further human factors research, Norway also intends to participate in a European Defence Agency project on power saving and power harvesting in the C4I arena. ■

Rune Lausund was speaking at WBR's Soldier Technology US 2009