



# FIST prepares to move through the Gate

Colonel Bill Pointing, Dismounted Soldier Systems Project Team Leader, DE&S

*“What we can be quite sure of is that in the current and likely future environment, things will change rapidly,” explained Colonel Bill Pointing, Dismounted Soldier Systems Project Team Leader at the UK’s DE&S, outlining a view that no procurement plan survives first contact, let alone a twenty five year equipment service life. “What we have got to get right is the understanding of what it is we want to do and how we deliver that in a relatively short timeframe. We need to be more responsive to change but to do so within a construct which allows us to increase volumes, change equipments but still interoperate.”*

The Future Integrated Soldier Technology (FIST) programme is currently working its way to a Main Gate decision on Increment 1 later this year. Colonel Pointing said, “We are hopeful that we should see ourselves coming out of Main Gate and getting equipment on contract later this year.”

## INCREMENTS 2 AND 3

Increment 2 of the programme is described as being about achieving the FIST vision; getting the necessary levels of connectivity, delivering enhanced situational awareness and passing more information in a meaningful and usable way. Simple delineation between the first two Increments of the programme is, at this stage, difficult not least because neither the Assessment Phase of Increment 2 nor the Increment 1 Main Gate have been completed.

Col. Pointing commented, “What we are looking to do with Increment 2 is to close the gap between the capabilities delivered by Increment 1 and the FIST vision. Increment 1 will not deliver that vision because things like power, weight and technology have got in the way of that and adjusted our ambitions. But we know where it is



Weight is important to everyone, and the UK puts a high premium on the ability of dismounted troops to operate away independently of vehicles © AJB

we want to go and we know the timeline in which we want to get there. What we have to do is identify how we best close a gap or decide if that gap can actually be closed down in its entirety. The lesson for FIST is that we have a clear set of ambitions but you have to be pragmatic about how you manage affordability, deliverability and technology.”

“Realistically, if we crack the FIST vision in Increment 2 in the timelines we are talking about, we will be doing well. It would be pragmatic to accept that there is also going to be an Increment 3; this should address the capabilities that we haven’t been able to deliver in earlier Increments.”

## PCMO

Like the overall programme, the role of the Prime Contract Management Office (PCMO) will necessarily evolve over time. “Increment 1 is clearly rather less complex than achieving the totality of the FIST vision,”

explained Col. Pointing. “There are still electro-magnetic compatibility and human factors integration issues to be resolved and that is where the PCMO is providing expertise and knowledge.”

“Clearly Increment 2 is a different thing; whether we choose to pursue a PCMO approach or employ a Systems Integrator or whether it is done in house has yet to be decided.”

In other programmes, at home and abroad, the customer is seeking to bring a greater portion of the integration capabilities in house, rather than opt to rely on industry to the extent they have done in the past. As far as FIST Increment 2 is concerned, the plan remains deliberately agnostic. Col. Pointing commented, “We don’t have any theology on this. When we come to Increment 2, we will have a look at it and determine the best way forward. The PCMO offer benefits and disbenefits. Doing things in house offers benefits and disbenefits too. We will take a

- ▶ judgement about what our ambitions are and how we are best able to achieve them.”

### ELSA

The Enhanced Low Latency Situational Awareness (ELSA) programme, an Urgent Operational Requirement (UOR), was fielded in Afghanistan in 2008 with mixed success. ELSA is a standalone system and won't be part of FIST's Increment 1 C3I but is nevertheless an invaluable feed into FIST's development.

“You can say that ELSA has not been wholly successful but you can't say ELSA has been wholly unsuccessful either. What our experience of ELSA shows is that boxes and wires aren't the whole capability, they just deliver a box with wire in it. There is great 'functionality' out there, whether it is actually any use when someone is shooting at you or before or after that particular event is another question. The real issue is giving people the equipment so that they can do different things or do what they are already doing better.”

“People thought C4I was going to be some sort of Battle Management System. You were going to be able to sit in some 'ops room' at section level with all your icons moving around you and you were going to be able to run the battle on a PDA. This is wrong. Section commanders tend to be far more engaged in seeing what is going on, forming a judgement and making decisions based on

what they can see. However, people who are not immediately in contact – the Company Sergeant Major, signallers and company commander will see a different picture on a C3I system and use the information to make judgements prior to, during and after contact.”

A significant portion of the criticisms of ELSA, have been attributed to a lack of preparation for the troops using it. Col. Pointing said, “It is almost impossible to give people new, complex equipment either very late in pre-deployment training or in the operational theatre itself and expect them to quickly adjust under pressure. The key message from ELSA is that you have to inject it at the right point in the training cycle. You have got to allow people to experiment with it, to get it right. Some of it is simply down to familiarity. If they are unfamiliar with the connectors, you get a lot of 'faults' which are not in fact faults – people for example may be trying to force the wrong cable onto the wrong box.”

“We are very focussed on equipment because it is something tangible. However, the most complex and the most important bits are the non-tangibles like the other non-equipment Defence Lines of Development that have got to be worked through to get the best value out of the equipment. Capability is the total system. The total system involves people and people require training, education and development and the chance to experiment.”

### WEIGHT REDUCTION

“[Weight reduction is] about identifying the things that we can do to make some fairly dramatic reductions in weight and offer choice to the user. There is a clear target to drive the weight burden down to an acceptable level, which is no more than a third of body mass. The possible solutions are driven by issues like ballistic protection, power management and confidence in resupply.”

Ultimately he believes weight reduction will come down to the soldiers or their commanders making informed choices about what is carried. He adds, “That is to do with elements of the systems that you don't automatically assume are drivers in terms of weight.” It is a complex area and there are a number of potential solutions. “Whether they are enough to radically change the weight burden or whether we have to change other element of the systems that we had not initially thought of, we don't know yet.”

Weight is important to everyone, and the UK arguably puts a high premium on the ability of dismounted troops to operate away independently of vehicles. It is a path that peers are increasingly looking to. Col Pointing commented, “It will be interesting to see how FIST and other similar programmes evolve over the next few years.” ■



“We need to be more responsive to change but to do so within a construct which allows us to increase volumes, change equipments but still interoperate” © AJB