

12th ICCRTS

Delivering Enhanced Military Capability

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Military Capability is a relative term. The same capability in one situation may well provide overwhelming force, whilst in another, against a greater threat, it can be quite ineffective.

Today's rapidly evolving threat scenario has led to a case for change in the systems which support the acquisition and application of military capability. The extant systems and practices must evolve to reflect a more dynamic and responsive approach, but the capacity to drive change within the ministerial and industrial environments has historically not been great. The dominance of monopoly/monopsony situations can create a pressure to maintain the 'status quo', driven often by the difficulties of measuring the value for money.

The realisation has grown that there are a number of dimensions which need to be considered if we are to improve the military capability at our disposal. These are:

1. The responsiveness and flexibility of the acquisition system
2. The coherence of the contributors and effectors
3. The relative readiness across the "lines of development"
4. The relationships with industry

"Capability" is often a poorly applied word. It is widely misunderstood and used. At a recent conference, the following question was posed to a senior industrial audience:

"do you think that the MOD can contract for capability in the delivery of the new surface combatant warship?"

The audience was given five reply options; the first was a simple "no" and the remaining four were varying degrees of "yes, but ...". Over 90% of the audience voted for options two to five, thus completely missing the point that Industry cannot and never will, be contracted deliver military capability.

Equipment, even a large platform, does not have capability: it only has performance. It is only when the other Lines of Development (LoDs) are considered and their combination is brought together in terms of Force Elements at Readiness (FE@R) that capability is able to be projected. Clearly, at the point of application Industry cannot deliver capability. It can, however, deliver performance and it can extend this to increasing levels of availability of evolving performance and it can take responsibility for its sustainment. In short, Industry can play a full role in the sustainment of enduring capabilities.

Command and Control is arguably the best example of the need to balance the contribution of the LoDs to military effectiveness. In general, it does not depend intrinsically on highly expensive equipment, although it is a major area for new innovation. It does, however, demand bringing a diverse set of components together organically (and collectively) with a rich mix of skills with a focus on information management to deliver the desired capability. Command and Control is an example of enduring capability; it clearly needs to continuously evolve. The UK MOD has adopted the term Through Life Capability Management (TLCM) to describe how it will in future manage enduring capability.

About two years ago in the UK, a joint MOD/Industry group undertook a specific examination of the practices needed to manage and balance, the delivery of the components of capability, through a process of trading, whilst taking into account the availability and impact of industrial capacity. This led to the establishment of two ground-breaking programmes which will be described later in the paper.

The lessons from these are applicable to the delivery of any military capability; from protected mobility to Command and Control, and the remainder of this paper will describe the way in which this was undertaken and the subsequent development of the practices, mechanism and behaviours that describe a basis for sustained change.

It is easy to launch “initiatives”, indeed they can multiply rapidly under the banner of driving change. In practice they can quickly become an “alternative to work” and do little more than providing an illusion of change. Two years ago, UK MOD probably had more initiatives than you could shake a stick at! Whilst this may be a symptom of the problem, the real difficulty lies with the “what happens next”, ie. incisiveness, the focus and the follow-up. [Behaviours don’t change with the publication of a few guidelines and a dose of good theory].

So, when we conceived the idea of some practical change interventions, we were quite clear that these needed to be delivered through real capability, funded programmes and a remit from on high that a licence to change practices existed. A further key facet from the outset was that Industry had to be embedded in the problem domain, not just the solution phase, i.e. not just at a procurement end, but deeply in the problem-solution tradespace.

The conclusion was to launch two high level programmes, each combining real deliveries and change objectives

The two programmes were called “Pathfinders”, covering what is probably best described as military “sub-capability” areas, these being:

1. Sustained Armoured Vehicle Coherence (SAVC)
2. Sustained Surface Combatant and Coherence (S2C2)

Let me first describe the problems in delivering a balanced portfolio of military capability across the breadth of the required national capability. Balancing this adequately given affordability constraints is difficult, but this is then compounded by what is probably now a superficial constraint across the three traditional services.

Trading is a continuous process, but several key stages exist throughout this cycle, taking due account at each one of the demands, the affordability and industrial capacity and impact.

In order to test out this process, the two Pathfinder teams were established with a mix of participants drawn from Industry and MOD, with a clear remit to place equal emphasis on the two primary deliveries:

1. The Content/Product, ie. the components required to meet the military capability
2. Process/Practices, ie. the practical mechanisms to inform and establish the TLMC process.

A strong steering body - chaired by a 3* General - was set up to focus the teams, review progress and guide future work. This would meet monthly for the twelve month duration of the programme to maintain a fast “drum beat” and provide consistent reaffirmation of the demand against both deliverables and unblock any obstacles to progress.

It was clear from the outset that the role of Industry in the team would prove to be of great benefit to both parties, whilst raising the mutual understanding of each others functions, demands, and constraints.

Consolidation in the industrial sector has gathered pace dramatically in the last 15 years, making competition a blunt instrument. Moreover, it has become apparent that the use of ineffective, competitive practices has contributed strongly to a lack of realism in the cost of solutions; it has also been the cause of delays in the acquisition process. Furthermore, the late engagement of Industry, (ie. at the point of procurement) has led to a “*fait accompli*” in the solutions pursued. The desire to

over-specify through “atomic” System Requirement Documents (SRDs) has lead to “premature solutioneering”, leaving extremely limited degrees of freedom for Industry to trade and balance within the cost solution envelope and employ appropriate innovation. The Pathfinders were positioned to make full use of the available trade space and thus circumvent many of these constraints.

Coherence and context became the two consistent drivers in the Pathfinder approach; Coherence across previously partitioned budget areas and LoD contribution: Context in terms of the balancing of appropriate solutions across a broad capability in a much less parochial, product-based fashion. By giving all the trades a military capability context, the solutions become both more robust and more defensible to scrutiny and aspects such as integration and discreet contribution could be more proactively considered.

What has been demonstrated is the ability to take a “top down” capability, focused Through-Life approach which can be applied more generally at the appropriate capability level. In doing this, the benefits of early industrial engagement have been amply demonstrated.

In the next phase of the Acquisition Change Programme, the embedding of Through Life Capability Management will be the major thrust of activity. The experience of the Pathfinders now provides a body of evidence and practice to extend the principles to further programmes and the particular challenges of Command and Control is one such area under consideration.

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