I would like to congratulate the Army for using this event, not just to talk about things, but to link it directly to force development; that is the way you turn these ideas into real capabilities. My remarks are not really aimed at the front row, but those who have not been part of this endeavour over the last six or so years. Force development is not done by the staff, it is done by the whole Army – you can choose to do it or not.

Force development is about purposeful action, so what I am going to do is hold up a mirror to some things that, when taken alone, may seem to be getting into the ‘tactical weeds’, but when considered collectively are more like ‘weak signals’; using General Martin Dempsey’s brilliant idea that if there is only one instance, it is probably tactical weeds, but if you are getting multiple weak signals then you have got a real problem and that is officer business.

I am also going to hold up a mirror to my own experience, now four years old, to see how fast the adaptation from Force Development has occurred; the ‘tempo’ of our own action-to-effect relative to the pace at which the ‘problem’ is also shifting. Is the British Army noticing, and then acting, on a range of ‘weak signals’?

![Assessing Future Capability Requirements](image)

This is where I entered the picture (Figure 1) and it is the slide I showed to my Executive Committee of the Army Board (ECAB) colleagues when we had no force development agenda in the British Army. It was a time when things were not going well in Helmand and so that was where, rightly, most of our effort was focussed.

When it comes to assessing future capability requirements, it is true that ‘prediction is very hard, especially about the future’, but that is what you have got to do and you can come at it from two ways. The traditional way is that someone in DCDC, someone like me in a two-year tour, writes a concept and quick as a flash nothing happens because in this country concepts are not geared to anything real (that might be a weak signal, you might want to act on that or you might not). The other way is to take cognisance of the fact that you are in the here and now, and that policy, resources, operations, and doctrine should form the basis for your war game.
So we then initiated ‘Agile Warrior’. Why agile? Because in ‘The Future Character of Conflict’ paper, written two years before, we concluded that in a time of diminishing technological edge, then ‘our people are our edge’. Wrong! John Day corrected us. He said we have a decision to make. We can make our people our agile edge, but do not assume it is in the British DNA, like a gift for counterinsurgency; you have to link the idea to action.

I decided that we would seek ECAB’s endorsement to pitch ‘making sense of hybrid warfare’. Whether you like the term or not, it is about the toxic cocktail of concurrent problems that are going to come at you and so it was about all of the Defence Lines of Development (DLODs).

So you cannot do a pitch like this without the obligatory quote from Sir Michael Howard (Figure 2) and the the bit I found people tended to focus on was ‘the impossibility of prediction’. But it seems to me that what he was actually saying was ‘you, the Army, have to make sure you are not too far off the mark’.

So here is my analogy, and I wish to be footnoted on this if anyone picks it up, force development is like being a great squash player, you dominate the T. From the T you can get anywhere on the court, but if you are not dominating the T then you are always reaching for the ball. The trouble is, in your world the court keeps changing size and shape and I would suggest that in the last eight years or so the T has been moving away from you.

So Global Strategic Trends painted a picture of population growth plus urbanisation. If you do not like Global Strategic Trends look at the McKinsey Global Institute. Their take is that urbanisation is a catalytic trend and it is important because you might fight in mountains, you might fight in deserts, you might fight in jungles, but actually urbanisation and population growth are gearing and energising lots of other trends so, I propose, this represents for our Army, both our most likely case and also worst case.

If you get it wrong, and Eliot Cohen has referred to this, by assuming you have some kind of great dominance over the adversary, it leads to strategic shock, and in this political climate you do not get many options for strategic shock before the plug is pulled on your war.

In 2008 the Israelis faced strategic failure; one of the reasons was because they could not do the basics: manoeuvring their infantry with their armour: air support being able to be brought in, against targets in urban areas; they could not evacuate their casualties; they underestimated their adversary’s ability to make use of terrain.
So turn to another campaign, the quote (Figure 3) from a RAND report looking at the Russians. For me the weak signal, the thing that should resonate with you that should perhaps prick your conscience, is the second part: ‘by not preparing for it the Russian military guaranteed that any fight would have a very high cost’. There were no command and control nodes to attack, the opposition acted as ‘independent hunters’ and the Russians were totally unprepared.

Why is this? There are a number of explanations, including for why our Army has not adapted as quickly to urbanisation as we might have wished. But let us not beat ourselves up, as at the time when this began we were in a bloody fight in Helmand, so the amount of institutional energy that could be devoted to thinking about the future was finite. You are not in that game any more you are in a different position.

The way we went about it was based on a quote I picked up from an airman who was the Vice Chief of Defence Staff in 2004, a man called Air Chief Marshal Sir Anthony Bagnall, who wrote that ‘our enemies are adapting and will exploit complex terrain’; as a result, in 2010, we decided to do a wargame using a brigade headquarters in Southampton. Remember, force development is done by and with the Army, not by staff officers to the Army.

Did our core ideas work? Well one of the things the brigade did was a real signals test; they drove their vehicles all over Southampton and found their planning assumption was about 75% wrong. They could communicate over 25% of the urban terrain. Is it a coincidence that all our signal schools are scattered around Salisbury plain? Maybe that is a weak signal, if you will excuse the pun.
Then we decided to look at how you would clear just one tower block and we engaged the Section Commanders, the tank Troop Sergeants, the Bombardiers etc. and there were some interesting deductions (Figure 4). But for me, the real weak signal is not that our consumption planning yardsticks are far too optimistic, it was when I suggested we update the Staff Officer’s Handbook, you know, that thing we use to teach all of our staff officers. We actually found it had been out of print for eight years; the weak signal is that no one had noticed. So I do not know what people were training on, I assume they were being taught the estimate and campaign planning because we love doing that because we know how to do it.

Turning to skill at arms – I am the Colonel Commandant of the Queen’s Division and in preparation for this talk I asked my divisional Command Sergeant Major if we are doing any urban operations training at our Section Commander course. He looked at the programme and we are not doing any; none of our section commanders are being taught anything to do with the urban – we train in Brecon.

Then (and this is the thing about force development you follow your instincts) I asked about shooting in the urban environment and being able to engage an enemy on the eighth floor, when we can probably just see their head and shoulders. It turns out there is no pamphlet that shows you how to do that and the point of aim we teach our soldiers is predicated on firing straight and level.

Does this matter? Well it turns out yes it does because when we went to the ballistic calculator we found that, even if you applied the marksmanship principles perfectly, you would still miss the target every single time. That to me is a weak signal and you can fix that by updating that pamphlet really quickly. But why was nobody interested enough to ask that between Global Strategic Trends in 2008 and now?

There is this risk of creeping irrelevance; doing the things we take as totemic, the things we love doing and are incredibly character-building, but actually may not be that relevant anymore because the T has inexorably moved away from us.

Next, manoeuvre – I asked if we train our armoured fighting vehicle crewmen to operate in the urban environment and the answer was ‘no’. The Commandant of the Armour Centre is trying to get some ISO containers so he can actually teach this stuff. That is six years after I issued this direction; it was not just a suggestion, as I was a 3* at the time and said ‘training should replicate the need to fight and manoeuvre in urban terrain’. The weak signal is how long it is taking us to have the idea and to turn it into action. There is something wrong with our processes if it is taking that long.

The assumption on Combined Arms Manoeuvre has been that it will always be done in the open, be it at Sandhurst or on Salisbury Plain and Lulworth, and then we will have the ability to apply these skills to whatever environment is required in mission specific training. That is a seriously flawed assumption, given the readiness profile that your warfighting division is now going to be on. Do not assume you are going to get MST, we did not for Kosovo.

Could [those online videos of armoured vehicles manoeuvring in urban Syria], be what the future of Combined Arms Manoeuvre looks like? How many of your soldiers have routinely done this kind of manoeuvre and live firing in Collective Training levels 0, 1, and 2? I suggest this might be more like the worst case because any adversary who is stupid enough to come out and fight in the open is going be destroyed by western airpower. But if you are against a near peer adversary you might be the one having to take refuge in the urban areas; that may be the only way you can survive and operate.
So one way or the other, the urban area is coming towards you and there are places where you can train for it (Figure 5). The French spent 140m euros building their CENZUB facility and, funny old thing, they have got ranges there on which you can fire at 45 degree angles – someone has thought it through. Meanwhile, as far as I am aware, we continue with our legacy facilities. I note that Lithuania has now opened its own urban warfare town and it has a second one opening next year. Is this a weak signal or very strong signal? If you intend to do something about it, and I know CGS does, how can you use the Whole Force Approach to energise this and make things happen in less than five years?

Taking my cue from John Gooch and Eliot Cohen’s book ‘Military Misfortunes: The Anatomy of Failure in War’, I put anticipate, learn and adapt into our core doctrine. It is not for me to judge how you are doing but I put forward these points (Figure 6) as prompts for your own discussions.
I may sound like a sycophant here, but it is worth noting just how remarkable it is what you have achieved in the last year. If you had asked me this a year ago I was seriously worried, but Vanguard, 77 Brigade, the ISR Brigade, AJAX, Strike, AH upgrade, the Army command model, Oman training hub, just an absolute blizzard of modernisation and adaptation.

The problem is that you are coming from an adaptation deficit and you need to change the tempo. You have got probably eight or more years of adaptation to make up, relative to adversaries and the environment. I think the weak signals in some areas add up to very strong concerns. This should be uncomfortable, as force development is meant to be disruptive and challenge comfortable, totemic (cap-badge defining in some cases) habits.

Furthermore, force development is everyone’s business. To illustrate, I issued a challenge five years ago, asking why it is that our fieldcraft pamphlet, which we issue to all of our soldiers and teach to all of the foreign armies that we go out to spread our wisdom amongst, has not been updated since the 1950s? Things such as ‘why are things seen: shape, shine, shadow, silhouette, and movement’; we have been teaching that to everyone time and again. Nowhere in our pamphlet does it say that ‘actually a change to the pattern of life can be something that is modern fieldcraft’. So what (then Lieutenant Colonel) Neil Unsworth did at the Infantry Training Centre, with no extra resource, was form a ‘community of action’, not a community of interest, and they put it right in three months and I guess this is what you are now teaching out on training teams.

Just to emphasise, I believe the warfighting division is exactly the right thing to do; it is short notice-to-move, so do not bank on mission specific training and assume it is a ‘come as you are party’. That means – reference Commandant Sandhurst – tactics are no longer just a vehicle for leadership, if they ever were considering lots of men and women left Sandhurst and went straight into the fight in Afghanistan without doing mission specific training. So, in the core of your training you must invest in the things you think are going to be the most challenging.

I will finish with another insight from Eliot Cohen in ‘Military Misfortunes’: these things, learn and adapt are not the same. You also need to anticipate and to learn ahead of time because you cannot afford the luxury of time to adapt in contact. That was the model of the United States Navy and it cost them dearly in blood and treasure in the Second World War. We will not have that luxury again.

END