

Written evidence submitted by Mr Michael Witheridge

Delivering the British Army's armoured vehicle capability

My father was a WO1 in the Royal Artillery for years. He instilled into me a considerable interest in and respect for the British Army. I still try to keep very much abreast of the latest developments and read military journals and publications avidly. I therefore consider myself to have the necessary knowledge for my comments on the Army's armour programmes to be taken seriously. Here are my comments for your inquiry into progress in delivering the British Army's armoured vehicle capability:

1) Challenger 2 MBT

There has been a considerable amount of discussion in recent times as to whether the UK should "gap" its main battle tanks, the theory being presumably that they are either put into storage or withdrawn from service altogether and not replaced until we join a development scheme for a completely new tank, which will probably not appear for 10 to 12 years.

Such a scheme seems absolute lunacy to me. A few years ago both Canada and the Netherlands decided to withdraw their main battle tanks from service. The error of their ways soon became evident and they both reversed their decisions, with some unfortunate consequences. The result is that the Netherlands are now leasing Leopard 2 from Germany at huge expense in order to retain skills to regenerate capability later!

Furthermore, at the present time no fewer than 13 major defence countries (including China, Russia, the USA, India, North Korea, Germany, France, Australia and Poland) are purchasing or planning to purchase new MBTs and/or upgrading existing fleets: The UK is the only major player planning to withdraw its fleet!

Without any tanks, the only direct fire anti-tank capability of the British Army would be 40mm cannons and Javelin ATGWs. Limited to such weaponry, we would only be able to perform COIN operations, and never fight against a peer enemy. Without the UK having MBTs and IFVs, we should be aware that we would: a) Not be able to take part in high intensity conflicts and b) Not be taken seriously as a coalition partner, especially by our NATO allies.

It must be remembered that no the vehicle can match the Main Battle Tank in its ability to take ground and to defend that ground. Even just standing at a cross roads in COIN operations, the MBT can be exercise a most imposing presence.

It has also to be remembered that to buy a new tank would almost certainly not be cheaper than an upgrade. Some experts reckon it would about three times more expensive! The solution then must be to go for the latter. The early thinking was that we only needed a refresh to optics, communications and electronics on Challenger for it to be a decent tank

again. However, the latest suggestion for an upgrade unveiled by RBSL features a new Rheinmetall turret armed with the L55 smoothbore gun (130mm), a computerised fire control system, new commander's and gunner's stabilised day/night sights and all-electric gun control equipment. Installation of the L55 will enable the tank to fire the latest Rheinmetall ammunition, including an armour piercing round and a programmable air burst round. There has not been much news on an upgrade to the power pack but that could be carried out at a later stage. If such an upgrade were carried out, we would end up with one of the best tanks in Europe again, probably with several export opportunities.

2) Warrior CSP

This seems to me a very necessary programme. Mechanized Infantry cannot be expected to deploy on foot to the area of conflict. The 245 Infantry Fighting Vehicles and the 135 vehicles for Repair Recovery and Artillery Observation Posts appear to me like the bare minimum needed.

The new turret and 40mm cannon appear to be working well, with the cannon able to fire on the move. From reports so far, the troops appear to like the vehicle and so, I would say, proceed with the order.

3) Ajax

This, on the whole, also appears a good choice. However, I have some reservations about the materials used in the vehicle. There have been some disturbing reports of metal cracking in the hull/chassis. If these reports are true, then the steel concerned must be replaced by something stronger and as soon as possible.

Boxer

One of the most ridiculous suggestions I have read recently appeared in a national newspaper and it stated that the most likely candidate to take over the role of main battle tank was the Boxer armed with a 120mm direct fire weapon! It will be remembered that in late 2019 the MOD signed into a 2.8 billion pounds contract for 523 BOXERs, as part of a Mechanized Infantry Vehicle contract costing 4.6 billions. The intention is to use these 523 vehicles to form the basis of the two STRKE brigades.

The Boxer armed with a 120mm gun would presumably be similar to the CENTAURO vehicle, in service with the Italian Army (i.e. a wheeled "tank"). The disappointing fact, however, is that such a vehicle is not a tank and bears no comparison with the ability of a genuine tracked main battle tank, such as Challenger2. Moreover, the main 120mm gun (as fitted to Centauro) is, according to some experts, a one-shot weapon. In other words, you

have to get your first round in and kill the opposition vehicle first, otherwise you will be “toast”.

In terms of expense, these Boxer vehicles would be just a start and the two STRIKE brigades would need many more vehicles to provide the numbers and variants necessary for those brigades to perform successfully. The two STRIKE brigades will almost certainly need fire support in the shape of a 155mm self-propelled gun and other equipment such as ammunition re-supply vehicles, anti-aircraft systems, bridgelayers and engineer and other specialist variants. They will certainly not be a cheap option. In fact they are likely to prove much more expensive than conventional armoured brigades. Some experts have suggested that the Strike Brigade Boxers will need fifteen to twenty variants in order to become an effective fighting force. Some believe it can be done because Boxer is a totally modular system: with APC, IFV, Reconnaissance, Howitzer, Bridgelay, Ambulance and Mobile Gun System versions. However, those people who thought that Strike would be cheaper than conventional Armoured or Armoured Infantry Brigades have got it very wrong!

AS90 Self-propelled 155m gun

We are perpetually being told that our Artillery is outranged by enemy artillery. Could not something be done to give AS90 the extra range required at very low cost? The Braveheart upgrade was planned for the gun quite a few years ago (the longer barrels necessary must still be held by either BAE or by the Army itself)

Conclusion

So what is the solution to the chaotic state of affairs the British Army finds itself in? I think the only answer must be to **postpone** the introduction of the Strike Brigades until we can afford to equip them properly (say in five or six years time when the concept is more mature and the money might be there). At the moment the budget just won't run to it. The answer must be:

- i) Form three (or four, if resources permit) Armoured or Armoured Infantry Brigades. They could be multi-role brigades, similar to those suggested in the 2010 Review.
- ii) Make them “as hard as nails”. It strikes me that any force able to field Challenger2 (upgraded), Ajax, Warrior 2, Boxer, AS90, MRV(P), HVM, Titan, Trojan, Terrier, Close Support Bridging, CRARRV, SV trucks, etc., etc., possibly supported by GMLRS, Sky Sabre (CAMM) and Watchkeeper etc from Divisional level will still be a force to be truly reckoned with.
- iii) Yes, those vehicles do include Boxer, which would not enter any Strike Brigades until the time is right. The Armoured/Armoured Infantry Brigades in the short term could include all 523 Boxers. They are very adaptable vehicles and could serve in the Armoured/AI Brigades

very easily. They could be integrated into such brigades to serve as APC “battle taxis”, command vehicles, mortar vehicles, ambulances , repair and recovery vehicles etc.etc. and then eventually transferred over to the Strike Brigades when it is timely to do so.

The concept of Strike is imaginative, but it is far from cheap and at the moment we cannot afford such new and highly expensive types of brigade.

3 September 2020