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Iraq Inquiry

Whether any assessments of the suitability of the existing PPV provision in Iraq were carried out following:

-the emergence of Explosively Formed Projectile (EFP) IEDs in Iraq in May 2004

-reports from GOC MND(SE), Maj Gen Dutton, in August 2005 that EFP IEDs were capable of penetrating vehicles including the Warrior armoured fighting vehicle

An IED trial conducted by Dstl in September 2004 concluded that the 'plate' [EFPs] present in Iraq did not pose a threat to Warrior, provided the appliqué armour was struck. Improved [EFPs] were identified by the in-theatre Weapons Intelligence Section (WIS), who forwarded the details to DI ST-LAND. DI ST-LAND tasked QinetiQ to conduct an initial exploitation of the new designs using mathematical modelling techniques. This initial exploitation concluded that the new designs possessed a significantly enhanced penetration capability when compared to previous designs, and may pose a threat to UK armoured vehicles including Warrior. QinetiQ were then tasked to reverse engineer the EFP designs, and conducted physical trials (with Dstl assistance) against targets representing Warrior. The trials concluded that the new EFPs were consistently able to penetrate the Warrior. It was also assessed that all other UK would be vulnerable, with the exception of fitted with the armour package. Recommendations were made in the report for potential solutions that would improve the performance of Warrior armour against the threat (Reference A). The initial conclusions of this report were earlier summarised in a presentation dated April 2005 (Reference B). It would seem likely that GOC MND(SE) would have been referring to this work in his reports of May 2005.

Following this assessment, HQ MND(SE) issued an Urgent Statement of User Requirement (USUR) for improved levels of protection on deployed Warrior. DEC(GM) issued a requirement for Warrior Additional Protection (WRAP), which would be addressed in two phases. WRAP 1 would entail the within the existing armour configuration. WRAP 2 would investigate the feasibility of complete reconfiguration of the Warrior appliqué armour package. Dstl reported on proposed solutions for WRAP 1 in July 2005 (Reference C). A Business Case was generated in July 2005 (Reference D), and the WRAP 1 solution was fitted in September 2005 (Reference E).

References

A Dstl/CR12601 V1.0 'Performance of Explosively Formed Projectiles Against UK Armour' dated 21 June 2005

B Dstl Presentation 'Performance of Explosively Formed Projectiles Against UK Armour' dated April 2005

C Dstl/WF16214 V1.0 'Warrior Additional Protection 1 (WRAP 1) Concepts' dated 19 July 2005

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D GM/EC-14-07-01-15 WR 'Operation TELIC 5 Urgent Operational Requirement I0XXX
Business Case: Warrior (WR) Additional Protection (WRAPUOR) dated 22 July 2005

E Dstl 'Summary of hard armour UOR upgrades for UK AFVs (V1.6) dated 3 February 2009

2. *The processes and mechanisms used by the Armed Forces and the Ministry of Defence to develop capabilities which would provide deployed forces with the ability to counter emerging threats during an enduring campaign such as Iraq, including:*
-the processes used

The example above on the evolving IED threat in Iraq 2004-2005 sets out the mechanism by which the department responded to such threats and provided capabilities to counter those threats. The detail provided on the UOR process and its evolution throughout the campaign provides further detail. Reference E above sets out the various upgrades to vehicle platforms in response to the evolving threat.

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