Building & Driving Operational Success

Ministry of Defence

UK MOD Land vehicle support and modernization initiatives

Brigadier PS Rafferty MBE
Head of Operational Support Programmes

May 2014, NDIA Conference, Reston, Virginia, USA
Building & Driving Operational Success

Agenda

- Introduction
- Organisation
- Current & Future Vehicle Programmes
- Strategic Support Supplier (SSS) Transformation

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Introduction

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Specialist & Logistic Vehicles

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Introduction

Service Provision

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Deployable Infrastructure

Expeditionary Campaign Infrastructure
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Current & Future Vehicle Programmes

## Multi Role Vehicle
- Legacy Utility Vehicle (unprotected) 1980s
- Life Extension Program 2030
- Multi Role Vehicle (Protected) 2020
- Multi Role Vehicle (Protected) 2020

## Cargo
- Support Vehicle 2007 6-15T
- NAV 2020 Up to 20T
- Future Non-Articulated Bulk Capability 2034

## Palletised Bulk
- DROPS (unprotected) 1990 15T
- EPLS 2009 16.5T
- Future Common Articulated Bulk Capability 2034

## Articulated Bulk
- Wheeled Tanker 2005 Up to 25T
- Heavy Equipment Transporter 2004 Up to 70T
- LET & GST (unprotected) 1994
- Future Common Articulated Bulk Capability 2042

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Future Battlefield Vehicle Laydown (AI BG)

- ABSV
- HPMV
- UV
- MRV-P
- CS Arty Bty
- CS Bns/Regts
- Bde Sp Area
- Div Sp Area
- F Echelon
- A1 Ech
- A2 Ech
- B Ech

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Future Battlefield Vehicle Laydown (Mech Inf BG)

- MBV
- HPMV
- UV
- MRV-P

- Recce/ISTAR Gp
- Sp Pls
- CS Engr Sqn
- BG HQ
- A1 Ech
- A2 Ech
- B Ech
- Soft-Skinned Vehs
- F Echelon
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Key Characteristics (Platform)

- Assessment of vehicles identified in DSTL Market Survey
- Basic Requirements:

1. Number of crew ≥ 4
2. Payload Capacity > 2500kg
3. Unladen Mass < 14000kg
4. Turning Circle < 18m
5. Width < 2.5m
6. Power to Weight Ratio > 20hp/t
7. Ground Pressure < 450kPa
8. Ground Clearance > 240mm
9. Ballistic Protection ≥ Level 2 (Objective Level 3)
10. Blast Protection ≥ Level 2a/2b (Objective Level 3a/3b)

<table>
<thead>
<tr>
<th>STANAG 4569 protection</th>
<th>Level 2</th>
<th>Level 3</th>
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<tbody>
<tr>
<td>Kinetic energy</td>
<td>7.62 x 39 API at 30 meters</td>
<td>7.62 x 51 AP at 30 meters</td>
</tr>
<tr>
<td>Grenade and Mine Blast Threat</td>
<td>6 kg (explosive mass) Blast AT Mine: 2a – Mine Explosion pressure activated under any wheel or track location. 2b – Mine Explosion under center.</td>
<td>8 kg (explosive mass) Blast AT Mine: 3a – Mine Explosion pressure activated under any wheel or track location. 3b – Mine Explosion under center.</td>
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</tbody>
</table>

- Medium Protection, Medium Mobility & Medium Capacity

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MRV-P Requirement

Single Statement of Need (SSoN):
‘The MRV-P capability is to provide a protected and adaptable general purpose platform, capable of conducting command, control and liaison functions, carrying small groups of personnel or a logistic load, providing a limited towing capability and operating in diverse climatic and topographical conditions worldwide in order to support and contribute to land, air assault and littoral manoeuvre operations’.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Command &amp; Liaison (2+2)</th>
<th>Command &amp; Control (2+2)+2 Static</th>
<th>Transport (2+0)</th>
<th>Troop Carrier (2+6)</th>
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<tr>
<td>LFR - 1624</td>
<td>LFR - 1431</td>
<td>LFR - 1140</td>
<td>LFR - 621</td>
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- Optimised for mobile liaison
- Also designed for static C2
- Carriage of unit stores
- 6 Pax Troop Carrying Vehicle
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MRV-P Indicative Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
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<tbody>
<tr>
<td>2013</td>
<td>Pre-Concept</td>
<td>Concept</td>
<td>Assessment</td>
<td>Demo</td>
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<td>2019</td>
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</tr>
<tr>
<td>2022</td>
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- URD
- SRD
- CONEMP
- SSoN
- KURs
- 3OAs
- MDAL

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**Longer-Term MRV-P Indicative Strategy?**

### Light (PM) – In Scope

<table>
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<tr>
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<td>RWMIK</td>
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<td>MRV-P</td>
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<td>800+</td>
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### Light (Non-PM) – Out of Scope

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MRV-P in the PM Fleet

Requirement all types is 7838

Potential Addl Requirement is circa 4000

800 MRVP

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NAV-P Silt Chart

- Possible run on of up to 475 additional DROPS
- Run-on 350 x DROPS
- 175 x 15T to EPLS (Convert)
- 170 x EPLS-P in Core
- Above Line Option: 350 x NAV-P

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Land Equipment Support Strategy

The way we were

Disparate support arrangements optimised by Equipment.
Differing interfaces with FLCs across equipments.

New Model

Current Position

The strategy has been developed and endorsed by D LE. The 1* led Programmes are now implementing their plans to deliver this strategy

Consolidated support optimised across platforms and activities.
Incentivised role for Industry
Coherent outputs to FLCs, with Army HQ and the Fleet Management Partner interfacing with Strategic Support Suppliers

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