

Section 4

# PEO LS TOP TECHNICAL ISSUES

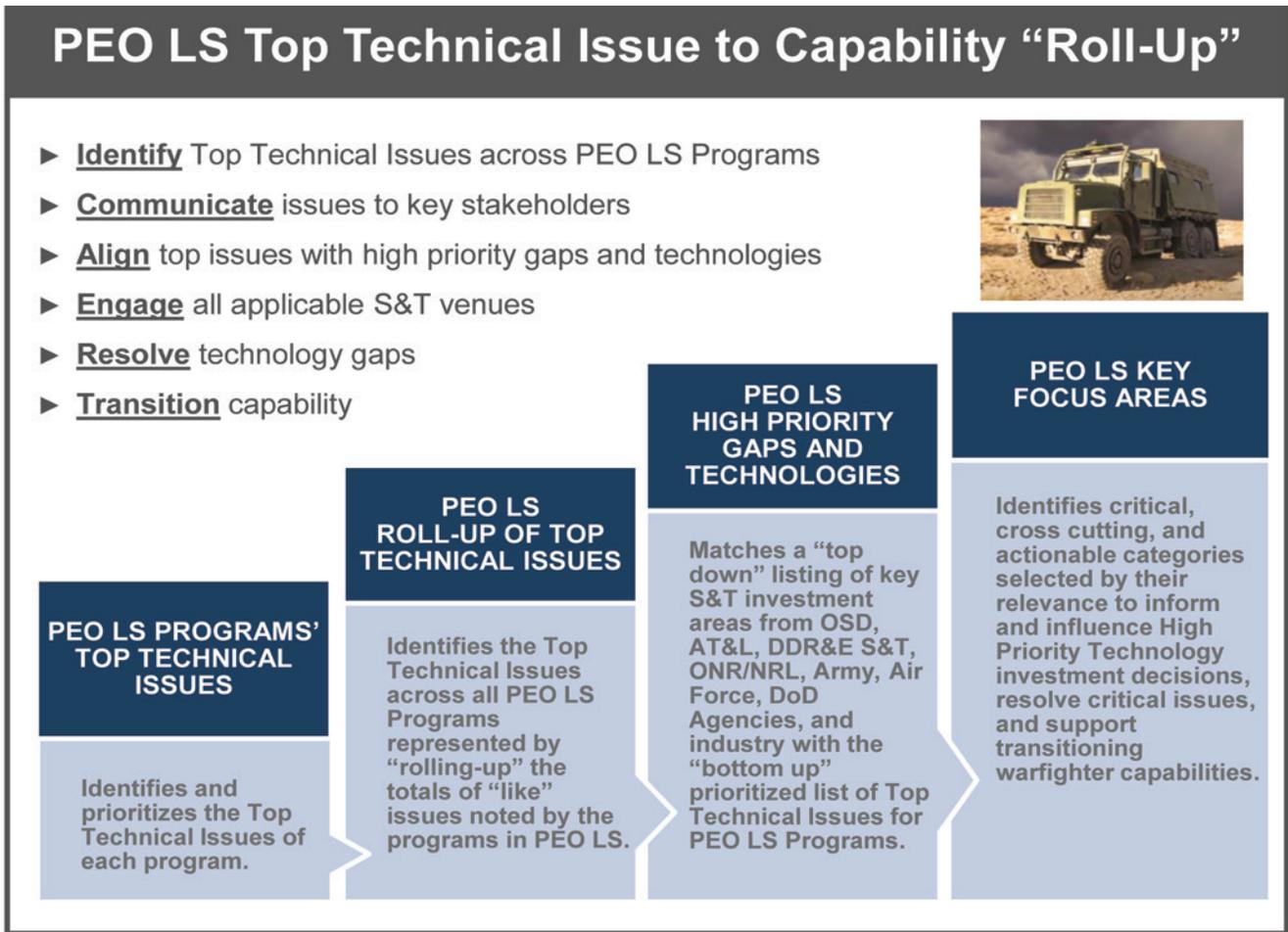


Figure 4-1. PEO LS Technical Issues to Capability “Roll-Up”

The process of determining which Top Technical Issue will result in development of an associated capability begins with identification and prioritization of Program Executive Officer Land Systems (PEO LS) programs’ Top Technical Issues. These issues were vetted through each program’s Science and Technology (S&T) Representative, Lead Engineer, Deputy Program Manager, and Program Manager for concurrence and prioritization.

The Top Technical Issues across all PEO LS programs are then “rolled up” into similar categories

that establish key Focus Areas and informs the prioritization of funding and research efforts. A “top down” approach of aligning S&T investment areas with the “bottom up” prioritized list of Top Technical Issues ensures a consolidated and focused effort to resolve each program technical issue (see Figure 4-1).

This process assists S&T representatives from all PEO LS programs to work through the Top Technical Issues of their programs and identify capability gaps, where S&T could potentially lead to requirement

solutions. This collaborative approach has proven extremely valuable not only in identifying individual program technical cross-cutting issues, but also in identifying technology issues that are common among other PEO LS programs. By understanding these common technical challenges, PEO LS can better align and leverage resources across the S&T Enterprise.

Figure 4-2 identifies the Top Technical Issues of each PEO LS Program.

<b>PEO LS Program Top Technical Issues</b>	
<b>Program</b>	<b>Technical Issues</b>
<b>Assault Amphibious Vehicle (AAV)</b>	<ul style="list-style-type: none"> <li>• Survivability</li> <li>• Weight / Buoyancy Management</li> <li>• Sustainment/In-Service Engineering</li> </ul>
<b>Amphibious Combat Vehicle Phase 1 Increment 1 (ACV 1.1)</b>	<ul style="list-style-type: none"> <li>• Survivability</li> <li>• Weight</li> <li>• Crew Visibility</li> </ul>
<b>Common Aviation Command &amp; Control System (CAC2S)</b>	<ul style="list-style-type: none"> <li>• Voice Network</li> <li>• Direct Air Cooling</li> <li>• Future Data Link Receiver and Processor</li> </ul>
<b>Ground Based Air Defense (GBAD)</b>	<ul style="list-style-type: none"> <li>• Stinger Night Sight Replacement</li> <li>• Secure Wireless Communications</li> </ul>
<b>Ground/Air Task-Oriented Radar (G/ATOR)</b>	<ul style="list-style-type: none"> <li>• Lowering Manufacturing Costs</li> <li>• Transmit / Receive (T/R) Module Efficiency</li> <li>• Lightweight Material</li> </ul>
<b>High Mobility Multipurpose Wheeled Vehicle (HMMWV)</b>	<ul style="list-style-type: none"> <li>• Performance</li> <li>• Energy Consumption</li> <li>• Reliability / Durability</li> </ul>
<b>Internally Transportable Vehicle (ITV)</b>	<ul style="list-style-type: none"> <li>• Safety (Stability)</li> <li>• Weight Saving Technology</li> <li>• Digital Architecture</li> </ul>
<b>Joint Light Tactical Vehicle (JLTV)</b>	<ul style="list-style-type: none"> <li>• Weight / Armor</li> <li>• Corrosion Resistance</li> <li>• JLTV - CCWC Missile Reloading Design</li> </ul>
<b>Logistics Vehicle System Replacement (LVSR)</b>	<ul style="list-style-type: none"> <li>• Fuel Economy</li> <li>• Increased Survivability</li> <li>• Safety</li> </ul>
<b>Medium Tactical Vehicle Replacement (MTVR)</b>	<ul style="list-style-type: none"> <li>• Fuel Economy</li> <li>• Increased Survivability</li> <li>• Safety</li> </ul>
<b>Mine-Resistant Ambush Protected (MRAP) Family of Vehicles: Buffalo, Cougar and M-ATV</b>	<ul style="list-style-type: none"> <li>• Transparent Armor / Ballistic Glass</li> <li>• Performance and Safety Improvements</li> <li>• C4I Interoperability (VICTORY)</li> </ul>
<b>Lightweight 155mm Howitzer (LW 155)</b>	<ul style="list-style-type: none"> <li>• Safe and Transportable Battery High Capacity Technology</li> <li>• Secure Wireless: Ruggedized / Low Energy</li> <li>• Navigation in a GPS Denied Environment</li> </ul>

Figure 4-2. PEO LS Technical Issues