

Section 4

PEO LS TOP TECHNICAL ISSUES

Realizing that the Marine Corps will continue to face challenges with modernizing its legacy tactical vehicle fleet, the PEO LS S&T Directorate has taken a consistent, deliberate, and focused approach toward assisting PEO LS Program Managers in answering the top technical challenges of their programs. The Top Technical Issues have been vetted through each program’s S&T Representative, Lead Engineer, Deputy Program Manager, and Program Manager for concurrence and prioritization.

The process of determining which Top Technical Issues would result in development of an associated capability began with identification and prioritization

of the top three technical issues of each program (see Figure 4-1). The Top Technical Issues across all PEO LS programs were “rolled up” into similar categories that established key focus areas and informed 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 ensured a consolidated and focused effort was conducted to resolve each issue.

This process assists S&T Representatives from all PEO LS programs to work through the top technical challenges of their programs and identify capability gaps where S&T could potentially lead to requirement

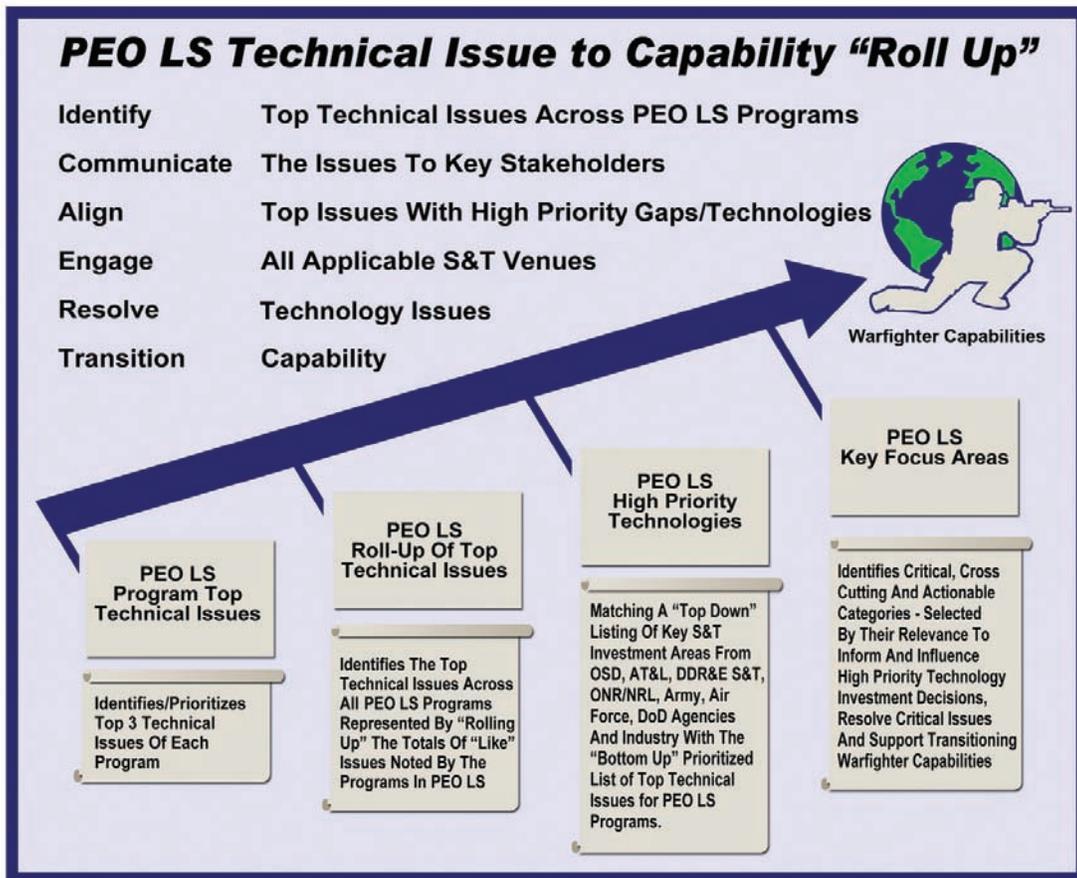


Figure 4-1. PEO LS Technical Issues to Capability “Roll-Up”

PEO LS Programs' Top Technical Issues	
Program	Technical Issues
Assault Amphibious Vehicle (AAV)	<ul style="list-style-type: none"> ▪ Survivability ▪ Weight/Buoyancy Management ▪ Sustainment/In-Service Engineering
Amphibious Combat Vehicle Phase 1 Increment 1 (ACV 1.1)	<ul style="list-style-type: none"> ▪ Survivability ▪ Weight ▪ Crew Visibility
Common Aviation Command & Control System (CAC2S)	<ul style="list-style-type: none"> ▪ Direct Air Cooling ▪ C2 Command Tools ▪ Multi-Level Security Solutions
Ground/Air Task Oriented Radar (G/ATOR)	<ul style="list-style-type: none"> ▪ Lowering Manufacturing Costs ▪ Transmit/Receive (T/R) Module Efficiency ▪ Gallium Nitride (GaN) Reliability
Ground Based Air Defense (GBAD)	<ul style="list-style-type: none"> ▪ Stinger Night Sight Replacement D-UNS ▪ Frangible 50 Cal and 7.62mm Rounds
High Mobility Multipurpose Wheeled Vehicle (HMMWV)	<ul style="list-style-type: none"> ▪ Performance ▪ Energy Consumption ▪ Reliability/Durability
Internally Transportable Vehicle (ITV)	<ul style="list-style-type: none"> ▪ Safety (Crew Protection) ▪ Safety (Stability) ▪ Weight Saving Technology
Joint Light Tactical Vehicle (JLTV)	<ul style="list-style-type: none"> ▪ Weight/Armor ▪ Corrosion Resistance ▪ JLTV- Close Combat Weapons Carrier Missile Reloading Design
Logistics Vehicle System Replacement (LVSr)	<ul style="list-style-type: none"> ▪ Fuel Economy ▪ Increased Survivability ▪ Safety
Medium Tactical Vehicle Replacement (MTVR)	<ul style="list-style-type: none"> ▪ Fuel Economy ▪ Increased Survivability ▪ Safety
Mine-Resistant Ambush Protected (MRAP) Family of Vehicles: Buffalo, Cougar and M-ATV	<ul style="list-style-type: none"> ▪ Transparent Armor/Ballistic Glass ▪ Increased Survivability and Improved Safety ▪ Fuel Economy
Lightweight 155mm Howitzer (LW 155)	<ul style="list-style-type: none"> ▪ Corrosion Prevention

Figure 4-2. PEO LS Programs' Top Technical Issues

solutions. This collaborative approach has proven extremely valuable not only in identifying individual program technical 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.

The Top Technical Issues of each PEO LS program are identified in Figure 4-2.