TOP TECHNICAL ISSUES

The identification and prioritization of Program Executive Officer Land Systems (PEO LS) programs' top technical issues starts the process of determining which top technical issues will result in the development of an associated capability. These issues are 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

PEO LS Top Technical Issue to Capability Roll-Up

- ▶ Identify Top Technical Issues across PEO LS Programs
- Communicate issues to key stakeholders
- Align top issues with high-priority gaps and technologies
- Engage all applicable S&T venues
- Resolve technology gaps
- Transition capability

PEO LS ROLL-UP OF TOP

PEO LS PROGRAMS' TOP TECHNICAL ISSUES

Identifies and prioritizes the Top Technical Issues of each program.

TECHNICAL ISSUES

Identifies the Top Technical Issues across all PEO LS **Programs** represented by "rolling-up" the totals of "like" issues noted by the programs in PEO LS.

PEO LS HIGH PRIORITY **GAPS AND** TECHNOLOGIES

Matches a "top down" listing of key **S&T** investment areas from OSD, AT&L, DDR&E S&T, ONR/NRL, Army, Air Force, DoD Agencies, and industry with the "bottom up" prioritized list of Top Technical Issues for PEO LS Programs.



PEO LS KEY **FOCUS AREAS**

Identifies critical, cross cutting, and actionable categories selected by their relevance to inform and influence High **Priority Technology** investment decisions, resolve critical issues, and support transitioning warfighter capabilities.

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

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.

PEO LS Programs' Top Technical Issue Roll-Up	
Program	Technical Issues
Assault Amphibious Vehicle (AAV)	SurvivabilityWeight/Buoyancy ManagementReliability/Sustainment
Amphibious Combat Vehicle Phase 1 Increment 1 (ACV 1.1)	SurvivabilityWeightCrew Visibility
Common Aviation Command & Control System (CAC2S)	 Bandwidth Efficient Radar Measurement Data Distribution Bandwidth Efficient Networked Voice Communications Vehicles Cross Domain Security Solutions Small Form Factor CAC2S Contextual Search Engines
Ground Based Air Defense (GBAD)	Counter Unmanned Aircraft System (UAS)Stinger Night Sight Replacement
Ground/Air Task Oriented Radar (G/ATOR)	 Lowering Manufacturing Costs Increased Dynamic Range Advanced Electronic Protection
Joint Light Tactical Vehicle (JLTV)	 Weight/Protection Vehicle Network JLTV-Close Combat Weapons Carrier (CCWC) Missile Reloading Improvements
Logistics Vehicle Systems Replacement (LVSR)	Fuel ConsumptionIncreased SurvivabilitySafety
Medium Tactical Vehicle Replacement (MTVR)	Fuel ConsumptionIncreased SurvivabilitySafety
Mine-Resistant Ambush Protected (MRAP) Family of Vehicles: Buffalo, Cougar, and M-ATV	 Stress cracks in welded construction and monolithic hulls both using high hard steel Transparent Armor Reduction in occupant accelerations with minimal stroke distance availability
Lightweight 155mm Howitzer (LW 155)	 Navigation in a GPS Denied Environment Safe and Transportable Battery High-Capacity Technology On System Power Generation and Conservation Secure Wireless: Ruggedized/Low Energy

Figure 4-2. PEO LS Programs' Top Technical Issue Roll-Up