

Section 1

INTRODUCTION

“The ATIP is designed to foster collaboration, align S&T investments, and support effective, affordable technology insertion within PEO LS Programs.”

—Program Executive Officer Bill Taylor, Marine Corps PEO LS

This is the sixth edition of the Program Executive Officer Land Systems (PEOLS) Advanced Technology Investment Plan (ATIP). As the only Marine Corps Program Executive Office, PEO LS is responsible for managing multiple Acquisition Category (ACAT) I, II, III & IV programs that are critical to the support of the Warfighter. This document identifies and prioritizes the Top Technical Issues for each program within PEO LS. The purpose of this document is to inform, influence, and align science and technology (S&T) efforts and focus investments to resolve issues and transition needed technologies into Programs of Record (PORs) as quickly as possible. The methodology used to develop the ATIP is the focused and repeatable Concept to Capability process, which is designed to encourage communication and stakeholder engagement within the S&T Enterprise, industry, and academia in order to resolve program technical issues and support the transition of critical and affordable capabilities to the Warfighter.

The challenges of today’s fiscally constrained environment of the post Operation Enduring Freedom (OEF) era require the Marine Corps to consider different approaches to maintain and modernize its equipment in order to retain its technological edge. With these constraints in mind, the theme of this edition is **Modernization through Modularity**. Modularity is the development of interchangeable system components that are linked through a set of common or standard interfaces to perform specific missions or tasks. Section 4.0, Futures, discusses how this theme applies to PEO

LS and how **Modernization through Modularity** could work.

The main focus of the ATIP is to enhance our warfighter capabilities by:

- ▶ **Identifying and defining the Top Technical Issues** that must be resolved within each program, some of which remain consistent from year to year. These issues are vetted and are advertised in the ATIP to alert and assist industry and Government regarding the S&T needs of major ACAT programs within PEO LS.
- ▶ **Resolving capability gaps and technical issues.** By identifying and publishing the technical issues, PEO LS is delivering input and assistance to the S&T Enterprise, industry, and academia.
- ▶ **Informing, influencing, and aligning S&T investment** by identifying the S&T needs of PEO LS and **supporting the technology insertion and transition into their POR.**

The overall technology requirements for PEO LS programs remain consistent from previous years and are as follows:

- ▶ Reliable and efficient electrical power generation to supply energy for our modern force
- ▶ Increased survivability while maintaining mobility

- ▶ Government owned and operated modeling and simulation capability that can accurately predict cost and performance solutions
- ▶ Open plug-and-play communications architecture in Marine Corps vehicles

The current status of the PEO LS programs can be seen in the Figure 1-1 below, with the following activities anticipated within the next year:

In the second quarter of fiscal year 2015, request for proposals (RFPs) will be released for:

- ▶ Amphibious Combat Vehicle 1.1 (ACV 1.1)
- ▶ Program Management (PM) Mine-Resistant Ambush Protected (MRAP) Operation and Sustainment Support in Kuwait

In the third quarter of fiscal year 2015, RFPs will be released for:

- ▶ Amphibious Assault Vehicle (AAV) Engineering Maintenance Test Support
- ▶ AAV Field Service Support
- ▶ PM Medium and Heavy Tactical Vehicles (M&HTV) Program Management Office Support Service Contract

In fiscal year 2016, RFPs will be released for:

- ▶ PEO LS Engineering and Development Test Support (first quarter)
- ▶ Common Aviation Command and Control System (CAC2S) Phase 2 RFP for Full Rate Production (third quarter)

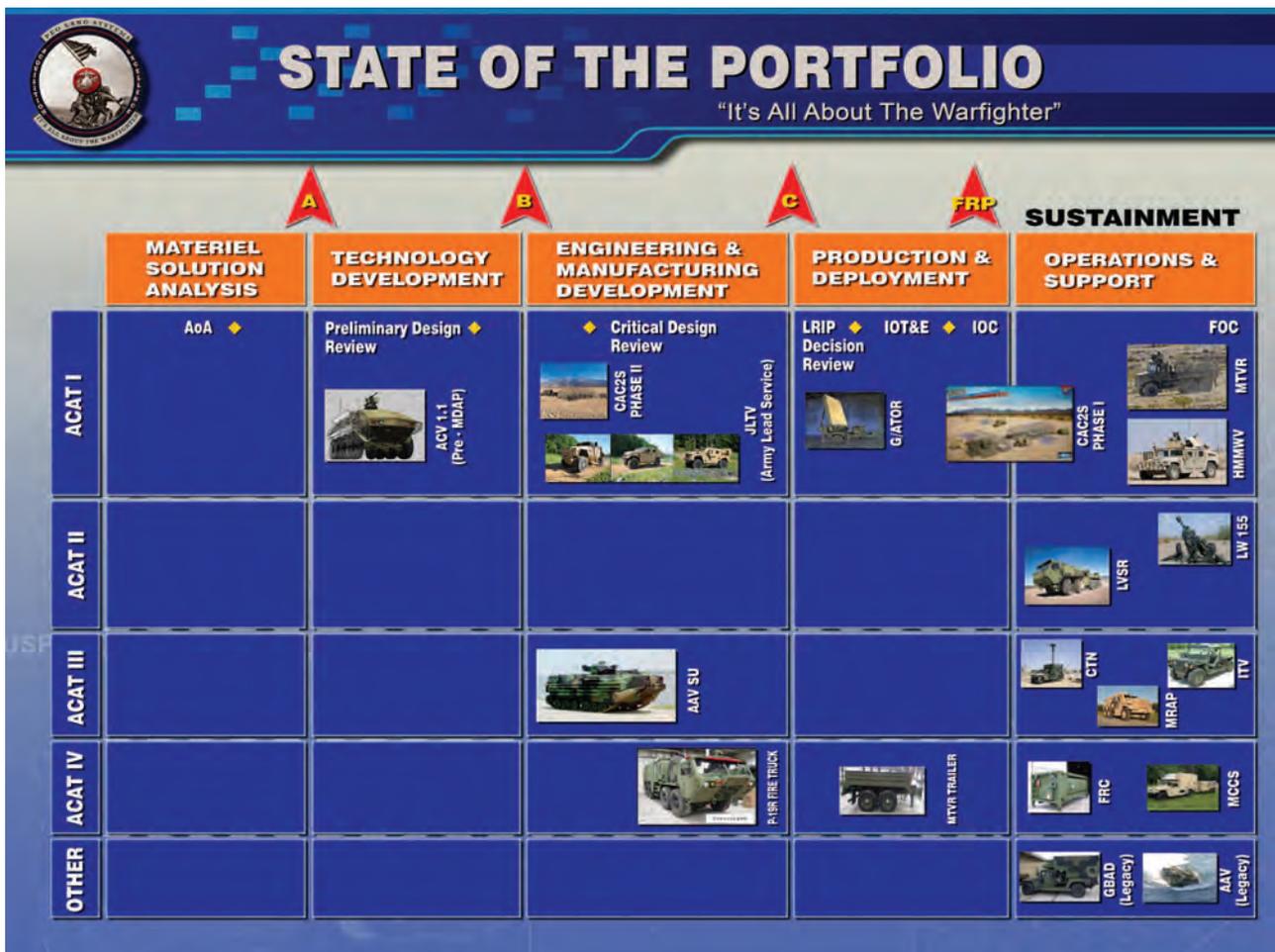


Figure 1-1. Program Executive Officer Land Systems State of the Portfolio

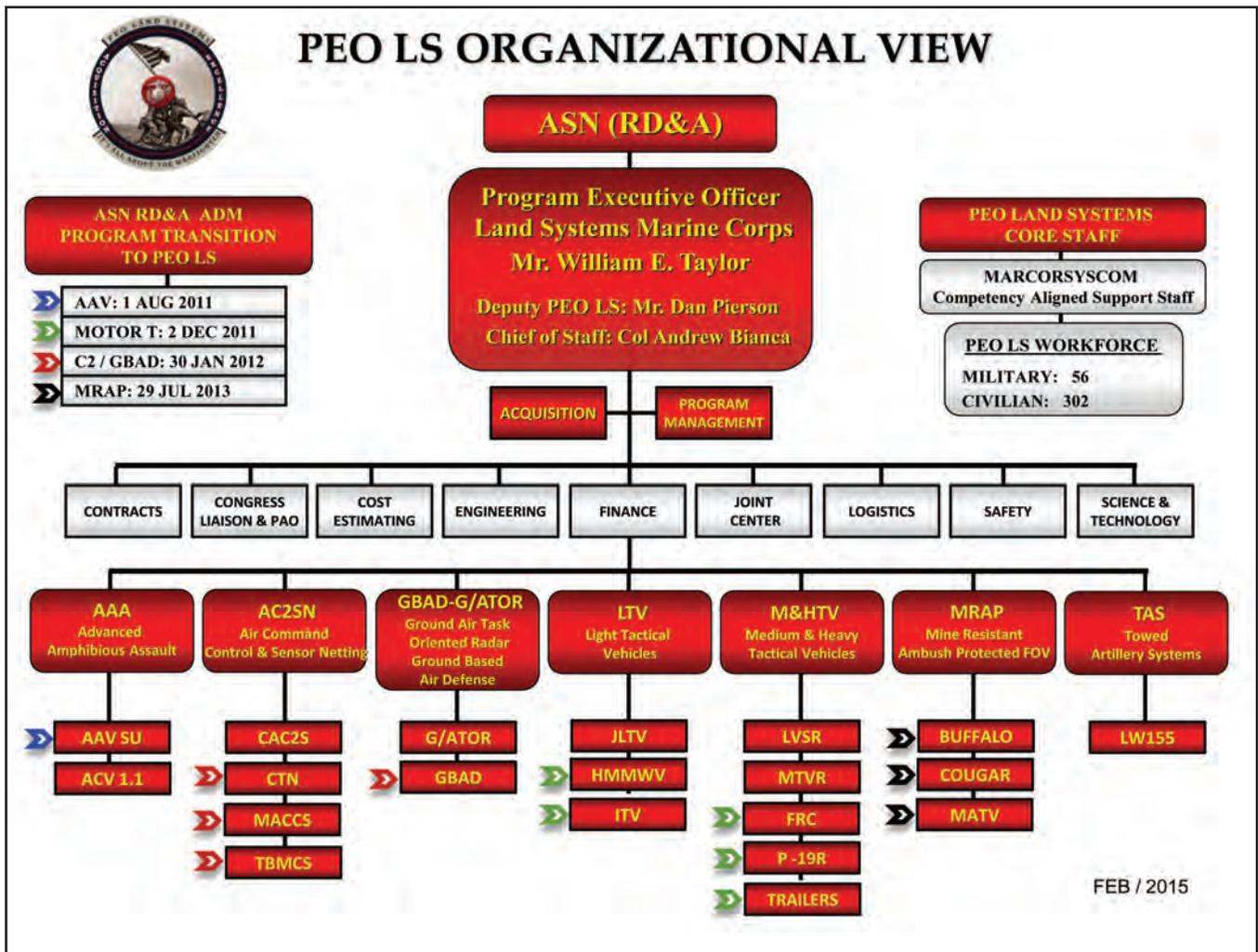


Figure 1-2. Program Executive Officer Land Systems Organization

PEO LS Organization

Program Executive Officer Land Systems—located at historic Hospital Point, Building 2210, Marine Corps Base Quantico, VA—is the Corps’ first Program Executive Office. PEO LS is a separate

command that reports directly to the Assistant Secretary of the Navy for Research Development and Acquisition (ASN (RDA)). PEO Land Systems’ integral relationship with the Marine Corps Systems Command (MCSC) leverages infrastructure, competencies, and technical authority.

“The security environment changes, the tactics, techniques and procedures change, the threats change, but what won’t change is our role as the Nation’s crisis response force of choice.”
 —General Joseph F. Dunford
 Commandant of the Marine Corps

PEO LS Mission

The mission of PEO LS is to meet warfighter needs by devoting full time attention to Marine Corps weapon systems acquisition while partnering with MCSC to develop, deliver, and provide life cycle planning for all assigned programs. Figure 1-2 illustrates the current organization of PEO LS.