



DEPARTMENT OF THE ARMY  
PROGRAM EXECUTIVE OFFICE, MISSILES AND SPACE  
5250 MARTIN ROAD  
REDSTONE ARSENAL AL 35898-8000

REPLY TO  
ATTENTION OF

SFAE-MSLS-LT

4 May 05

MEMORANDUM FOR Program Executive Officer, Missiles and Space  
(SFAE-MSL/BG Mike Cannon), 5250 Martin Road, Redstone Arsenal, AL 35898-8000

SUBJECT: PATRIOT/MEADS CAP Unique Identification (UID) Implementation Plan

1. References:

a. Memorandum, Under Secretary of Defense, Acquisition, Technology, and Logistics (USD(ATL)), 23 Dec 04, Subject: Policy for Unique Identification (UID) of Tangible Personal Property Legacy Items in Inventory and Operational Use, Including Government Furnished Property (GFP).

b. Memorandum, Office of the Assistant Secretary of the Army, Acquisition, Logistics, and Technology (ASA(ALT)), 22 Dec 04, Subject: Implementation of UID Policy.

2. The PATRIOT/MEADS CAP UID Implementation Plan is herewith submitted as required in the above references for ACAT 1D programs.

3. This PATRIOT/MEADS CAP UID Implementation Plan references the PATRIOT PAC-3 UID Implementation Plan in several places. The PATRIOT PAC-3 (an ACAT 1C program) UID Implementation Plan will be submitted later this year to meet the 16 Jan 06 suspense for ACAT 1C programs in the above references.

4. The POC is Mr. Daniel S. Beck, SFAE-MSLS-LT-PC, 955-3574, e-mail Daniel.Beck@mssl.army.mil.

Encl

A handwritten signature in black ink, appearing to read "John K. Vaughn".

JOHN K. VAUGHN  
COL, AD  
Project Manager  
Lower Tier Air and Missile Defense

## **Unique Identification (UID) Implementation Plan for:**

**Program System Name:** PATRIOT/MEADS      **Program Element:** SSN C53201  
CAP

**Program Manager:** COL John K. Vaughn      **PEO:** Missiles and Space  
(MS)

**Date of Plan:** 4 May 2005      **ACAT:** 1D

### **REFERENCES:**

Memorandum, Office of the Under Secretary of Defense, Acquisition, Technology, and Logistics (USD(ATL)), 29 Jul 03, subject: Policy for Unique Identification (UID) of Tangible Items – New Equipment, Major Modifications, and Re procurements of Equipment and Spares

Memorandum, USD(ATL), 26 Nov 03, subject: Update to Policy for UID of Tangible Items – New Equipment, Major Modifications, and Re procurements of Equipment and Spares

Memorandum, (USD(ATL), 22 Dec 03, subject: Revision of Update to Policy for UID of Tangible Items – New Equipment, Major Modifications, and Re procurements of Equipment and Spares

Memorandum, USD(ATL), 3 Sep 04, subject: Update to Policy for UID of Tangible Items

Memorandum, USD(ATL), 23 Dec 04, subject: Policy for UID of Tangible Personal Property Legacy Items in Inventory and Operational Use, Including Government Furnished Property (GFP)

Memorandum, Office of the Assistant Secretary of the Army, Acquisition, Logistics, and Technology (ASA(ALT)), 22 Dec 04, subject: Implementation of UID Policy

Department of Defense Guidelines to Uniquely Identifying Items, Assuring Valuation, Accountability and Control of Government Property, Version 1.4, 16 Apr 04

Department of Defense Guidelines for the Virtual Unique Item Identifier, Version 1.0, 29 Dec 04

MIL-STD-130L with Change 1, Identification Marking of US Military Property, 20 Dec 04

Aviation and Missile Command (AMCOM) Undated Draft Memorandum, subject: Charter for Automatic Identification Technology (AIT)/Radio Frequency Identification (RFID)/UID Integrated Product Team (IPT)

Program Executive Officer (PEO), Missiles and Space (MS) Memorandum dated 7 Mar 05, subject: PEO Letter of Instruction (LOI), L-05-01, Implementation of UID Policy

## **DESCRIPTION:**

The PATRIOT/Medium Extended Air Defense System (MEADS) Combined Aggregate Program (CAP) is a process by which the PATRIOT System transitions to MEADS. The MEADS mission is to provide low-to-medium altitude air and missile defense with the capability to counter, defeat, or destroy tactical ballistic missiles, air breathing threats to include cruise missiles, unmanned aerial vehicles, tactical air-to-surface missiles, and anti-radiation missiles. PATRIOT currently provides a significant capability against these threats; however, as the system continues to age, maintaining the system will become more costly as the system components become obsolete and difficult to acquire.

MEADS will be interoperable with other airborne, ground-based, and sea-based sensors, and will provide 360-degree coverage with improved seeker/sensor components. MEADS will provide air and missile defense of vital unit of employment and unit of action assets associated with Army and Marine Corps maneuver forces. MEADS will provide forces with defense against multiple and simultaneous attacks and will have a netted distributed architecture with modular components to increase survivability and flexibility of employment in a number of operational configurations. MEADS will offer tactical mobility via C-130 and helicopter transport that is not possible with PATRIOT. In addition, MEADS requirements for strategic lift are significantly reduced due to the use of smaller and lighter end items.

MEADS consists of the following Major End Items (MEI): PATRIOT Advanced Capability (PAC)-3 Missile and Missile Segment Enhancement (MSE); Battle Management Command, Control, Communications, Computers, and Intelligence Tactical Operations Center; Surveillance Radar; Multi-function Fire Control Radar; Launcher; and Launcher Reloader.

## **STRATEGY:**

### **Current:**

In the FY06 budget, the PAC-3 and MEADS RDT&E budgets are combined based on a Defense Acquisition Board Milestone B decision on 1 Jul 04. The Army revised the MEADS acquisition strategy to combine management, development, and fielding of both the MEADS and PATRIOT systems. The PATRIOT/MEADS CAP will provide for the

evolution of the PATRIOT/PAC-3 system to the MEADS objective system through the early incremental introduction of selected MEADS major end items (MEI). This approach provides for earlier fielding of enhanced air and missile defense capabilities across the currently fielded force to counter the evolving threat and leverage the knowledge gained in the development and fielding of the PATRIOT System into the MEADS program. The CAP strategy will achieve MEADS objective capability through an evolutionary approach by incrementally inserting MEADS MEIs into the current PATRIOT force. The MEIs will be developed and fielded in three acquisition increments. An Acquisition Decision Memorandum was signed on 6 August 2004 approving all three increments of the CAP with a First Unit Equipped date of FY2015. The PAC-3 missile is the baseline missile for the MEADS system. The Missile Segment Enhancement missile, which provides for greater ranges, will be the objective missile for the system.

MEADS is a tri-national co-development program among the U.S., Germany, and Italy to replace the U.S. PATRIOT air defense systems, PATRIOT and HAWK systems in Germany, and NIKE systems in Italy. Participating countries will sign a Memorandum of Understanding for each program phase. The North Atlantic Treaty Organization (NATO) MEADS Management Agency (NAMEADSMA) is a subsidiary body of NATO providing management of the MEADS program on behalf of the participating nations of the U.S., Italy, and Germany and is responsible for managing the system acquisition. The U.S., Italy, and Germany signed the Design and Development (D&D) MOU on September 24, 2004, September 27, 2004, and 22 April 2005 respectively. NAMEADSMA awarded a MEADS D&D letter contract to MEADS International (MI) on 28 September 2004, at a not-to-exceed value of \$3.4B. A multinational joint venture headquartered in Orlando, FL, MI's participating companies are MBDA Italia, the European Aeronautic Defence and Space Company and Lenkflugkörpersysteme in Germany, and Lockheed Martin in the United States. MI will develop the core objective MEADS System for all three countries. Contract objective is to design, develop, test, and evaluate production representative of MEADS hardware.

#### **Future:**

New acquisitions for the PATRIOT/MEADS CAP MEIs will include requirements for all designated items to be delivered marked in accordance with DoD UID policy, as well as for optimizing marking location and technique for all required components. Low Rate Initial Production for CAP Increment 1 is currently planned to commence in FY08 and will include UID marking requirements. Government Furnished Property will adhere to UID requirements, as well, and subsequent CAP increments will also include UID requirements.

#### **Legacy Items:**

Legacy equipment in service and in inventories requiring UID will be the PATRIOT PAC-3 equipment transitioning to MEADS. Marking of legacy equipment will be addressed in the PATRIOT PAC-3 (an ACAT 1C program) UID Implementation plan, to

be submitted by 15 January 2006. Items addressed will include PAC-3 missiles (SSN 49200), MSE missiles (SSN C53101), and PATRIOT ground support equipment (SSN C50700). Virtual UID for legacy items will be addressed, as well, in the PATRIOT PAC-3 UID Implementation Plan. Lessons learned during implementation of UID for PATRIOT will be used to develop business strategies for implementation of UID for the PATRIOT/MEADS CAP, to identify opportunities to exploit the capabilities of UID marking, and to develop measures of success and exit criteria for significant elements of PATRIOT/MEADS CAP UID.

**Depots and Maintenance Facilities:**

Included in the scope of work with the MEADS D&D contract with MEADS International (MI) is analysis of total support concepts for support at depot level. Analyses will include full and interim contractor logistic support and contrasting analyses with conventional depot level maintenance concepts. UID cannot be addressed at these facilities until support concepts are developed.

**Technical Documentation:**

Also included in the scope of work with the MEADS D&D contract with MEADS International (MI) is development and preparation of a technical data package, level 3, for MEADS. Engineering drawings and detailed design documentation will address UID for all qualifying equipment. Development of technical documentation will include strategies to minimize non-recurring costs for UID marking.

**Exemptions and Exclusions:**

None requested.

**SCHEDULE:**

<b>Element/Dates</b>			
		<u>FY Start Date</u>	<u>FY Complete Date</u>
<b>1.0</b>	<b>Preparation Activities</b>		
1.1	Priorities for application of UID and associated data transfer established ( <i>specified in Figure 2</i> )	05	05
1.2	Listing of items requiring UID completed for each application priority ( <i>1.1 application categories...see Figure 2</i> )	08	10
1.3	UID marking strategy studies and ROM estimates completed	05	05
1.4	AIS integration strategy studies and ROM estimates completed	05	05
1.5	Budget for UID implementation submitted	05	05
<b>2.0</b>	<b>Implementation/Execution Activities</b>		
2.1	Legacy contracts (issued prior to 1 Jan 04) modified	N/A	N/A
2.2 (1-N)	Key program trigger events (physical marking of items) identified	05	05
2.3	Progress reviews	05	10
<b>3.0</b>	<b>Capability achieved (physical marking &amp; ability to transfer Pedigree data to Registry)</b>		Full Capability Achievement Date
3.1	All new solicitations include UID requirements	08	10
3.2	Legacy contracts modified	N/A	N/A
3.3	Assignment of Virtual UIDs	N/A	N/A
3.4	Virtual UIDs loaded into Registry	N/A	N/A
3.5	GFP in possession of contractors (in-plant GFP – virtual)	08	10
3.6	Items in operational use	08	10
3.7	Items in inventory (ICPs, Supply Depots, etc.)	08	10
3.8	Depots, PATRIOT/MEARS CAP Maintenance Facilities	06	10
3.9	UID capable AIS	08	10

Figure 1. Elements/Dates

**PRIORITIES AND TRIGGER EVENTS:**

1.1 Established priorities for application of UID and associated data transfer (insert priority number: 1 (high), 2 (med), 3 (low), 4 (not applicable))

- 1   New solicitations, Post-Jan 2004
- 4   On-going Contracts, Post-Jan 2005
- 2   GFP in possession of contractors, Post-Jan 2005
- 3   Operational equipment, Post-Jan 2005
- 3   Assets in inventory, Post-Jan 2005
- 3   Assets in depot maintenance, Post-Jan 2005

Exemptions or exclusions to the UID policy require approval by: PEO, MS

2.2 Identify Key Program trigger events (physical UID marking of items): *(no more than 8)*

- Missile and Ground Support Equipment Production
- Initial and Replenishment Spares Production
- Equipment returned to manufacturers and vendors under contractual support agreements
- Equipment returned to Depot/Maintenance Facility for Repair, Rebuild, and Overhaul

Figure 2. Priorities/Trigger Events

**FUNDING:**

<b>FY</b>	<b>06</b>	<b>07</b>	<b>08</b>	<b>09</b>	<b>10</b>	<b>11</b>	<b>12</b>
<u>Program Resources</u>							
<u>Infrastructure \$M</u>							
<u>Funded</u>							
<u>Unfunded</u>							
<u>Manpower \$M</u>							
<u>Funded</u>							
<u>Unfunded</u>							
<u>Training \$M</u>							
<u>Funded</u>							
<u>Unfunded</u>							
<u>Total \$M</u>							
<u>Funded</u>	0	0	0	0	0	0	0
<u>Unfunded</u>	0	0	0	0	0	0	0

Figure 3. Funding/Cost

There are no additional funding requirements for UID for the PATRIOT/MEADS CAP. All new MEADS equipment will be produced under new contracts and all costs will be rolled up into the cost for each new delivered production item. Additionally, by the time the first new PATRIOT/MEADS CAP equipment is delivered, UID equipment and

processes, as well as any required training, will have been well-established at contractor facilities, vendors, and depots. Funding for legacy item UID for PATRIOT PAC-3 equipment transitioning to MEADS will be addressed in the PATRIOT PAC-3 UID Implementation Plan.

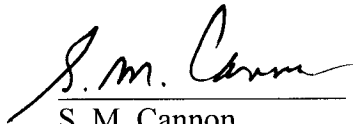
**SUBMITTED:**



John K. Vaughn  
Colonel, Air Defense  
Project Manager  
Lower Tier Air and Missile Defense

5/4/05  
Date

**APPROVED:**



S. M. Cannon  
Brigadier General, USA  
Program Executive Officer,  
Missiles and Space

20 May 2005  
Date

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Claude M. Bolton, Jr.  
Assistant Secretary of the Army,  
(Acquisition, Logistics, and Technology)  
US Army Acquisition Executive

\_\_\_\_\_  
Date

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Michael W. Wynne  
Acting, Under Secretary of Defense,  
(Acquisition, Technology, and Logistics)

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Date