COMPANY (Bus. Area, Facility or Unit) Unique Identification (UID) And Radio Frequency Identification (RFID) Implementation Approach Dated February 17, 2005

FOR PLANNING PURPOSES ONLY!

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<u>KEY.</u>

Red font...Insert specific data for Business Area, Unit or Facility

1.0 DOCUMENT INTENT.

This document is to be used to communicate internally and externally, COMPANY's (business area, facility or unit) UID and RFID implementation approach. The approach is a cost effective implementation methodology to fulfill Department of Defense (DoD) UID and RFID long-range strategies. This document describes a common strategy to be used in the performance of DoD prime contract and subcontracts under the responsibility of COM-PANY_____ (business area, facility or unit). UID compliance for classified assets will adhere to DoD's UID Classified Policy requirements and Program requirements.

Pursuant to the December 23, 2004 UID Policy Update (*Attachment 1*) from the Acting Under Secretary of Defense for Acquisition, Technology and Logistics and the November 1, 2004 letter to Lockheed Martin's Chief Executive Officer (*Attachment 2*) from Major General USAF – Director of Defense Contract Management Agency (DCMA), concurrence with this document constitutes approval of the UID/RFID approach at COMPANY_____ (business area, facility or unit).

2.0 APPLICABILITY.

This agreement is applicable to the following location(s):

The UID requirement is not applicable to the following Programs and Parts because they will no longer be in inventory or operational use by December 2010:

3.0 CAGE CODES AFFECTED. (Attachment 3)

4.0 DOCUMENT GLOSSARY.

COMPANY's Part A, B, C and D Overview of UID/RFID Elements (*Attachment 4*). Document Definitions (*Attachment 5*).

5.0 BACKGROUND

5.1. DoD REQUIREMENTS

5.1.0 UID–New Solicitations and Acquisitions (Part A): In July 2003, DoD announced a Defense Federal Acquisition Regulation Supplement (DFARS) policy for UID of specified tangible items to be required on new solicitations issued on or after January 1, 2004. Interim DFARS 211.274-1 and DFARS clause 252.211-7003 have been issued to direct implementation of the policy. MIL-STD-130L w/ Change 1 required the use of 2D Data Matrix technology and is incorporated in contracts that include the DFARS clause. The UID contract requirement includes the physical marking of specified items and providing associated data elements which are to be processed through Wide Area Workflow (WAWF) and/or flowed directly to the DoD UID Registry.

5.1.1 UID–Government Furnished Property (GFP) at Contractor Locations (Part B):

DoD's requirement for UID marking of GFP at contractor sites is expected to be effective January 1, 2006. DoD's tentative plan for implementation is to use virtual UIIs for GFP at contractor locations with the physical marking of GFP with 2D Data Matrix technology when the GFP is moved to another Commercial and Government Entity (CAGE) Code or Government location.

We expect DoD will require Contractor submission to the UID Registry a listing of all existing GFP no later than January 1, 2006 and submission of a final 2005 DD Form1662, DoD Property in the Custody of Contractors, March 2006.

5.1.2 RFID-Palletized Unit Loads. Exterior Containers, Nested UID Packages and OCONUS Shipped Level 4 Containers (Part C): On October 2, 2004, DoD released an updated policy for use of passive RFID on palletized unit loads, exterior containers and UID nested packages. Also, it the required use of active RFID on Level 4 containers shipped OCONUS. MIL-STD-129P Change 3 has been issued to direct implementation of the policy. The DFARS rule on RFID has not been issued so there is no general RFID contractual requirement. The RFID requirement was expected on DoD solicitations issued after October 1, 2004 for 2005 product deliveries to DoD's San Joaquin and Susquehanna locations. In 2006, we expect RFID tagging requirements for deliveries to all DoD depots and in 2007 we expect nested UID packages to require RFID tagging. RFID also involves supplying associated data elements, via an Advance Shipping Notice, which are flowed to WAWF and/or to the Distribution Standard System (DSS). Implementation dates may slip because the DFARS rule to implement RFID has been declared a significant rule by the Office of Management and Budget (OMB). That means DoD must complete and submit a detailed cost/benefit analysis for review by OMB before OMB will consider releasing a proposed RFID rule for public comment.

5.1.3 UID–Existing Legacy Property in Inventory and Operational Use (Part D): On December 23, 2004, the UID Policy was updated and now indicates the intent to apply UID to existing tangible property items in inventory and operational use. The Office of the Secretary of Defense's (OSD's) goal remains the same: Complete UID marking of items and all specified embedded assets by December 31, 2010. It is recognized that programs will have different levels of completion by 2010 because fielded items are not to be removed from service for the sole purpose of UID marking. Programs or items phased out of inventory by December 31, 2010, are to be set apart in plans as a UID exemption. The Director of the Defense Contract Management Agency (DCMA), with industry partners, will continue to lead the development of strategies using Single Process Initiatives (SPIs) and block changes to expedite UID implementation and DCMA will publish a quality assurance plan. A SPI should be pursued only when we are willing to execute block changes to our contracts for which we receive no compensation because the benefits and costs are in balance. Other types of agreements may be appropriate and should be pursued when necessary.

The policy requires DoD Officials to submit DoD UID implementation plans as follows: (1) DoD ACAT ID programs to OSD by June 2005, (2) all other programs to their Milestone Decision Authorities (MDA) by January 2006, (3) Deputy Under Secretary of Defense (Logistics and Materiel Readiness) to publish by May 31, 2005 an initial plan for DoD organic depot maintenance operations and full operating capability at all organic depots in place NLT Fiscal Year FY 2007. FY 2007 is planned as the year when serialized assets are entered into the DoD UID registry and UID marking can commence as legacy items are returned for maintenance. Expected outcomes for CY 2005: (1) OSD UID budget guidance to components by April 2005, (2) 2010 UID Exemption List published for sun-setting programs, (3) DoD UID Planning Program Manager (PM) workshops.

The updated policy also indicates that the requirement for acquisition data is optional for Part D legacy items. Modified contracts will indicate which legacy items will require acquisition data. UID involves the physical marking of specified items along with supplying the government

acquisition cost (as required) and additional associated data elements which are processed through WAWF and/or directly to the UID Registry.

MIL-STD-130L, Department of Defense Standard Practice for Identification Marking of US Military Property, – Change 1 requiring the use of 2D Data Matrix technology has been issued. MIL-STD-130M is also currently under draft review by government and industry.

5.2 OBJECTIVES.

COMPANY_____'s (business area, facility, unit) approach to UID and RFID was developed with the following objectives:

- Provide a cost effective methodology for both COMPANY_____(business area, facility, unit) and DoD programs to fulfill DoD UID and RFID long-range strategies.
- Implement a common, phased implementation approach for COM-PANY_____(business area, facility, unit).

5.3 IMPLEMENTATION TEAM.

COMPANY______'s (business area, facility, unit) implementation team consists of representatives from ______(Programs, Contracts, Supply Chain Mgmt, Engineering, Manufacturing/Assembly, Material Handling, Shipping/Traffic, Government Property, Quality, Logistics, WAWF, Information Systems, I-GUIDES, DCMA, DCAA, Major teaming partners/suppliers). This team is augmented with support from other functions when needed.

Additionally, there is a COMPANY UID/RFID Program Office that develops common toolsets that can be tailored to the needs of the sites in UID/RFID implementation. To date, over 50 common toolsets have been developed. For example: Estimating toolsets, I-GUIDES, WAWF integration guidance, Subcontractor flow-down guidance, etc. *Attachment 6 provides a listing of common toolsets available.*

5.4 CONDITIONS AND ASSUMPTIONS.

UID and RFID requirements will impact the majority of COMPANY entities because they require new 2D Data Matrix and RFID technology, application, valuation and data insertions into existing processes.

Samples:

- 2D Data Matrix technology is not currently the prevailing marking methodology and multiple part marking formats are in use and required of Contractors/Sub-contractors.
- XX% of items will not require Engineering Drawing Release Changes (additional engineering analysis to insert 2D Data Matrix content) due to label/nameplate formats.
- XX% of items are sub-contractor buys.
- RFID technology is not currently the prevailing package tagging methodology.

5.5 CONTRACT STRATEGIES.

COMPANY will consider impact of environmental and permanency issues dictated in Mil-Std-130L – Change 1 (or later revisions) and request special contract provisions to mitigate the impact if necessary.

5.6 UID/RFID MARKING, TAGGING AND VERIFICATION EQUIPMENT.

Selection of marking, tagging, and verification equipment (to comply with applied quality requirements) will be based on Business Area, Unit, Facility and/or program specific needs.

5.7 PARENT-CHILD UID RELATIONSHIP APPROACH.

UID requirements will include the reporting of parent-child relationships between the end item UII and its embedded item UIIs upon the item's delivery. *Attachment* 7 defines Parent-Child and clarifies our approach to parent-child relationships.

6.0 COST EFFECTIVE IMPLEMENTATION METHODOLOGY.

6.1 PART A AND PART D.

6.1.0 Operating Capability.

The ability to apply the 2D Data Matrix technology and provide the data to the DoD UID Registry will be completed by NLT XX/XX/XXXX.

6.1.1 Marking Approach.

When contractually required to apply UID, UID identified items will either be physically marked using 2D Data Matrix technology or assigned a virtual UII number. Associated data will be captured in I-GUIDES and flowed through WAWF and/or to the DoD UID Registry. If contractually directed, a UID listing of specified, serial managed legacy property will be supplied to the UID Registry.

- Newly designed items will be physically marked using 2D Data Matrix technology prior to delivery to DoD.
- Pre-designed and pre-existing items (in production, on order, in inventory, in stock, or at remote locations, etc. prior to the contract solicitation) will either be physically marked using 2D Data Matrix technology or virtually UID'd prior to delivery to DoD.
 - a. Wherever possible, the 2D Data Matrix UID symbol will be added to existing nameplate and label marking formats. Nameplate and Label individual drawings will not be updated for the sole purpose of UII insertion until the drawings are updated for some other purpose.
 - b. If a key UII physical marking opportunity (trigger event) arises to physically mark a virtually UID'd item, then the item will be physically marked with 2D Data Matrix technology maintaining its original virtual UID number. Additionally, associated data will be updated and/or captured as required.
 - c. By Sept 30, 2008, all items that may have been virtually UII'd, still in possession of COMPANY______ (business area, facility, unit), will be reviewed with the appropriate customers to determine the business case (value proposition) for engineering drawing changes for the sole purpose of UID physical marking insertion. If physical marking is deemed appropriate, it shall be accomplished NLT December 30, 2010 in accordance with subsequent contract direction.

6.1.2 Ull Physical Marking Opportunities (Trigger Events).

Key trigger events are cost effective opportunities to physically mark an item utilizing 2D Data Matrix technology, such as:

- During major change modifications
- During minor change modifications if the current marking method can easily be modified to add UID content.
- During major restores (repairs)
- During minor restores if the current marking method can easily be modified to add UID content.

6.1.3 Cost Benefits Analysis.

Sample:

XX hours per label/nameplate to update the documentation required to incorporate UII changes. There are approximately XX part numbers with label/nameplate drawings which yields a total estimated time of XX hours to update individual drawings for the sole purpose of UII insertion.

XX hours per engineering drawing change/analysis....XX part numbers which would require planning/engineering drawing change/analysis, etc. which yields a total estimated time of XX hours...

6.1.4 Common Valuation Approach.

The following valuation definition is based on the current interim DFARS 211.274; 252.211-7003 clause. For the purposes of valuation, an "item" is defined as a single hardware article or unit formed by a grouping of subassemblies, components or constituent parts required to be delivered in accordance with the terms and conditions of a contract.

When submitting a Material Inspection and Receiving Report for an "item," contractors must report the Government's unit acquisition cost (also known as the item's valuation). However, the Material Inspection and Receiving Report does not require re-porting of the Government's unit acquisition cost (valuation) for embedded subassemblies, components, and parts requiring unique item identification. Modified contracts will indicate which legacy items will require acquisition data.

COMPANY_____'s (business area, facility, unit) common approach to establishing the appropriate value for the UID items is as follows:

- For fixed-price type line, subline, or exhibit line items, use the unit price identified in the contract at the time of delivery.
- For cost-type line, subline, or exhibit line items, where the estimated cost and fee are discretely provided, use that value as our estimate of the fully burdened unit cost to the Government for the item at the time of delivery.
- If the estimated cost and fee are not discretely identified, use only the recurring cost plus a proportional share of the estimated fee for the item (unless the non-recurring costs cannot be segregated from the recurring costs) as our estimate of the fully burdened unit cost to the Government for each item at the time of delivery.
- The Government's unit acquisition cost of embedded subassemblies, components, and parts in delivered items need not be identified.

6.1.5 Supplier Flow-down.

UID marking is a prime contractor responsibility. The requirements of DFARS 252.211-7003 shall be flowed to subcontractors when paragraph (c)(1)(iii) applies. Flow-down will not be automatic, since it may be more advantageous for COMPANY_____ (business area, facility, unit) to mark certain items provided by subcontracts (e.g., commercial items when the subcontractor has no marking capability). Before deciding to mark sub-contractor items, warranty issues must be considered.

Existing supplier/vendor contracts/purchase orders should not be modified for the sole purpose of UID insertion unless considered essential to program(s). Additionally, COM-PANY_____ (business area, facility, unit) shall not specify the UII construct or the type of data qualifiers to be used by a subcontractor. Subcontractors should determine which construct they will use based on their prevailing method of product serialization.

Communication of UID Requirements to sub-contractors included:

- Electronic letters were sent to approximately 1500 COMPANY suppliers in September 2004.
- The Subcontract organization monitors contracts that include UID marking requirements to assure that suppliers comply with UID marking requirements.

6.2 PART B.

6.2.0 Operating Capability.

The ability to apply the 2D Data Matrix technology and provide the data to the DoD UID Registry will be completed by NLT XX/XX/XXXX.

6.2.1 Marking Approach.

When contractually required, UID identified items will either be physically marked using 2D Data Matrix technology (if no UID exists) or assigned a virtual UID number (if no UID exists) or the existing UII will be captured. Associated data will be captured in a property management database or I-GUIDES and flowed through WAWF and/or directly to the DoD UID Registry as required. If required, a UID listing of specified legacy GFP will be supplied to the UID Registry and other funding vehicles will be considered to accomplish this tasking (versus individual contract modifications).

When contractually directed, a GFP asset movement will be physically marked with 2D Data Matrix technology if not previously marked. If a virtual UII has already been assigned to the asset, its virtual UII number will be its physical marking UII number. Additionally, associated data will be updated and/or captured in a property management database or I-GUIDES and forwarded to the DoD UID Registry as required.

- When physically marking GFP, wherever possible, the 2D Data Matrix UID symbol will be added to existing nameplate and label marking formats. Nameplate and Label individual drawings will not be updated for the sole purpose of UII insertion.
- A small percentage (exceptions) of GFP assets which require planning/engineering drawing changes analysis, etc will be delivered with a virtual UID number unless its value proposition to DoD is greater than the cost of the planning/engineering drawing changes analysis for 2D Data Matrix technology insertion.

6.2.2 Cost Benefits Analysis.

Sample:

XX hours per label/nameplate to update the documentation required to incorporate UII changes. There are approximately XX assets with label/nameplate drawings which yields a total estimated time of XX hours to update individual drawings for the sole purpose of UII insertion.

XX hours per engineering drawing change/analysis....XX assets which would require planning/engineering drawing change/analysis, etc. which yields a total estimated time of XX hours...

6.2.3 Common Valuation Approach.

COMPANY <u>(business area, facility, unit)</u> will provide the government cost data (valuation) per line item as directed by contract.

6.3 PART C.

6.3.0 Operating Capability.

The ability to apply RFID technology and provide the data to the WAWF and/or to the Distribution Standard System will be completed by NLT XX/XX/XXXX.

6.3.1 Tagging Approach.

As required by contract, all DoD UID nested packages, palletized unit loads, and exterior containers delivered to DoD locations will be passive RFID tagged. Additionally, as required by contract, any DoD OCONUS Level 4 containers shipped will be active RFID tagged. Associated data will be captured as required in a shipping system and/or I-GUIDES and an Advanced Shipping Notice will be supplied to the DoD receiving location. The Advanced Shipping Notice will identify the contents of the palletized unit load/exterior container/OCONUS Level 4 container as required and flowed through to the WAWF and/or to the Distribution Standard System.

6.3.2 Supplier Flow-down:

RFID requirements will be flowed down to suppliers and vendors as required via a supplier information packages.

7.0 COST RECOVERY METHODOLOGY.

In July 2004, DoD issued guidance related to the cost recovery of UID costs. It allows a significant amount of flexibility due to the diversity of circumstances which surround each company's business environment.

Costs of the COMPANY UID/RFID team are collected at the COMPANY level and are allocated to each business sector based upon.... These costs will be added to unique non-recurring cost incurred by the individual business units for ultimate cost recovery.

OSD UID Cost Recovery Guidelines:



COMPANY_____ (business area, facility, unit) will use the following common cost recovery approach for UID and RFID for other than Capital Assets:

Examples:

- Negotiate a single fixed rate for allocation to all DoD contracts for estimated non-recurring UID and RFID costs (direct, indirect, non-capitalized equipment, systems/software, etc. at all organizational levels). This rate will be utilized until all investment cost is liquidated. Once investment costs are recovered, the rate will no longer be effective.
- Fields basic UID/RFID capability under Indirect [FPRA (Forward Pricing Rate Agreement) adjusted accordingly].
 - o Marking/reading equipment
 - Basic processes & process documentation
 - o Initial training for affected personnel
- Develops, documents, and validates basic marking methods direct ink and labels under company discretionary funding
- Should a particular RFP/application require development of additional marking methods (such as dot-peening or laser etching, for example), the cost and schedule impact for such development will be priced and booked to the affected contract

- Individual RFPs/contracts bear their direct cost for marking (small recurring per application plus any Engineering N/R for drawing/spec revisions).
- All supplier costs for a particular contract will be Direct.
- Supplier/subcontractor price & schedule impacts will be proposed in each individual RFP response

8.0 DATA RETENTION.

The COMPANY records retention schedule of, Records Management Program, requires retention of shipping and receiving documentation for 6 years. Retention of RFID/UID information for six years from date of creation of the shipping/receiving record will satisfy the requirements of FAR Subpart 4.7 for retention of RFID/UID information. COMPANY must, however, ensure that once a UID has been used to uniquely identify an item, that same number will not be used to identify any other item. Hence, COMPANY businesses will retain sufficient information on UIIs to preclude reutilization of those numbers when identifying other items in the future.

9.0 ESTIMATED OVERALL COST TO IMPLEMENT.

Capital Assets (tangible/intangible): Non-Capital Assets:

- Non-recurring (minus capital assets):
- Recurring:

10.0 OVERALL IMPLEMENTATION TIMELINE

See Attachment 8

11.0 REFERENCE DOCUMENTS.

Attachment 1 - Acting Under Secretary of Defense for Acquisition, Technology and Logistics, December 23, 2004 UID Policy Update



UID Policy Legacy Items Signed.pdf

Attachment 2 - Defense Contract Management Agency's (DCMA) November 1, 2004 letter to COMPANY Chief Executive Officer

Attachment 3 – Listing of CAGE Codes Affected

Attachment 4 – COMPANY's Part A, B, C and D Overview of UID/RFID Elements Most recent Overview can be located at:

Attachment 5 - Document Definitions



Attachment 6 – Listing of Common UID/RFID Toolsets Most recent toolset listing can be located at:

Attachment 7 - COMPANY Parent-Child Industry View

Most recent Parent-Child relationship can be located at:

Attachment 8 - Overall Implementation Schedule

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12.0 COMPANY CONTACT INFORMATION.

Name Title Location Phone Numbers E-mail

13.0 DOCUMENT CONCURRENCE.

The concurrence date of this document is XX/XX/XXXX.

FOR THE GOVERNMENT

FOR THE CONTRACTOR

(SIGNATURE)

(SIGNATURE)

(TITLE) **DCMA UID POC is:** (TITLE)