



UNCLASSIFIED
USTRANSCOM



*Documenting Multi-module
Shipping Systems*

23 June 2008
Gary Friedrich
USTRANSCOM J6-AD 618-229-1890





UNCLASSIFIED

Sponsor Background

- USTC J-6 Data Quality Team
 - Component of J6-AD Corporate Data Office
 - Catalyst for solving DTS data exchange issues
 - Host for USTC sponsored Data Quality Working Group (DQWG)
 - Purpose: Address and prioritize DQ issues affecting USTC, its component commands, and other enterprise organizations
 - Membership: USTC J3/J5-4/J6, AMC, MSC, SDDC, DLA-DLIS, FORSCOM
 - Meetings: Monthly Pre- and Formal
 - Website: <https://www.us.army.mil/suite/page/473533>
 - Contact: dataquality@ustranscom.mil





UNCLASSIFIED

Issue

- DQ Issue # 0109 Multiple MSLs on Quadcons & Tricon TEUs
 - Source -- Mr. Robert Bell, USA FORSCOM
 - Action officers --
 - Previous: LTC Steve Estep, TCJ6-AD
 - Current: Gary Friedrich, TCJ6-AD
 - Previous consideration -- LTC Estep
 - Deployment User's Group Conference, Ft. Eustis 5-7 Feb 2008 – sidebar discussions with:
 - Army G-4
 - TC-AIMS PMO
 - TC-AIMS contractors
 - ITO representatives from some larger CONUS Army bases





Problem

- Issue submitter has identified a need for standardized, specific guidance on managing TCN, MSL, and RFID when consolidating (linking together) multi-module containers
- Defense Transportation Regulation (DTR) – no “specific” guidance currently exists for documenting multi-module shipping systems
 - BICON
 - TRICON
 - QUADCON
 - AnyCON
- Change/update needed in DTR Part II, Cargo Movement and Part III, Mobility





UNCLASSIFIED

General Policy Solution

- Each BICON/TRICON/QUADCON module will be considered as a single shipment unit
- At Origin, create single TCN, MSL and RFID tags for each module
 - Allows for consolidation/deconsolidation at any node in DTS
 - Does not compromise the in-transit visibility (ITV) requirement for individual modules
- Assemblage of single BICON, TRICON, OR QUADCON modules into Twenty-foot Equivalent Units (TEU) requires the creation of an additional, new TCN, MSL, and a RFID tag





UNCLASSIFIED

Example – ITO Consolidation

- Use Case 1:
 - **Bravo Company** initial deployment –
materiel **RDD: 01 Sep 2008**
 - Packs materiel into two QUADCON modules
 - Prepares their own mobility TCN, MSL, and RFID for each separate QUADCON module
 - Moves QUADCON modules to ITO





UNCLASSIFIED

Example – ITO Consolidation

- **Charlie Company** (already deployed)
 - Rear echelon personnel send late arriving material (now sustainment) to deployed unit with **RDD: 15 Aug 2008**
 - Pack materiel into two QUADCON modules
 - Prepare sustainment TCN, MSL, and RFID for each module
 - Move QUADCON modules to ITO





UNCLASSIFIED

Example – ITO Consolidation

– Service Installation Activity

- ITO has four QUADCON modules – two mobility and two sustainment to ship to same OCONUS SPOE
- Shipment economy – ITO will consolidate the four modules into one Twenty-foot Equivalent Unit (TEU)





UNCLASSIFIED

Solution – Use Case 1

- Apply the DTR Part II, Cargo Movement, Multi-Module Documentation approach (assume ITO level consolidation)
 - Consolidation TCN represents “Parent-Child” relationship between new consolidation TCN and existing TCNs for modules
 - Create consolidation TCN based on lead container number of the module with the earliest Required Delivery Date (RDD) --
for **Use Case 1** earliest RDD is Charlie Company’s sustainment RDD of 15 Aug 2008





UNCLASSIFIED

Solution – Use Case 1, continued

- Consolidation MSL will boldly display the word “Consolidation” inside border of label
- Place Consolidation MSL prominently on the lead container of the consolidation unit
- Burn consolidation RFID and place prominently on the lead module.
 - NOTE: Do not remove or alter the MSLs or RFIDs on the individual modules. This will preserve ITV of individual modules should deconsolidation occur later in transportation movement





UNCLASSIFIED

Use Case 1: Prototype MSL - Consolidation

CONSOLIDATION				
TCN		SW81238350D001XXX		
C O N S O L I D A T I O N	From	SW8123	TAC / Type Service / Postage	
	In-the-clear Address		SZZZ	
	3 Lines Max, 35 Characters Per Line		Frt LTL	
	XXXXXXXXXX1XXXXXXXXXX2XXXXXXXXXX3XXXXX			
	Piece	1	Of	1
	Weight (lb.)	7760	Date Shipped	1090
	RDD			999
	Cube (ft.)	385	Project	9BU
	Priority			1
	Ship To / POE	In-the-clear Address		
DOV	5 Lines Max, 35 Characters Per Line			
	Abcdefg Hgijklmno Pqrstuv Wxyz			
	Abcdefg Hgijklmno Pqrstuv Wxyz			
	XXXXXXXXXX1XXXXXXXXXX2XXXXXXXXXX3XXXXX			
POD	MSL, Supply, & TCMD Data			
RMS				
FMS Case	CKM			
DLA Data	ABD77ZR			
	Dest: 30D135			
	CD:			
	Spur:			
	W55XGJ	Ultimate Consignee / Mark For Consignee		
		Ultimate / Mark For Consignee Address		
		5 Lines Max, 35 Characters Per Line		
		Abcdefg Hgijklmno Pqrstuv Wxyz		
		Abcdefg Hgijklmno Pqrstuv Wxyz		
		XXXXXXXXXX1XXXXXXXXXX2XXXXXXXXXX3XXXXX		





UNCLASSIFIED

Example – Port Consolidation

- Use Case 2:
 - **Delta Company** – directed to deploy
 - Deployment equipment already sent to APOE/SPOE
 - Day before departing Installation, **crew-served weapons** secured in one TRICON module and sealed; materiel **RDD: 01 Aug 08**
 - Single TRICON Module transported to Port of Embarkation (POE)





UNCLASSIFIED

Solution – Use Case 2

- Apply the DTR Part III, Mobility, Multi-Module Documentation approach
- POE operator consolidates **Delta Company**'s module with other modules at the Port
 - Port operator consolidates IAW DTR Part II, Appendix M
 - Consolidation TCN/MSL represent “Parent-Child” relationship
 - Port operator will generate TCN IAW DTR, Part II, Appendix L, Paragraph H





UNCLASSIFIED

Solution – Use Case 2, continued

- Consolidation RFID tag will contain new TCMD information linking all module TCNs together for ITV tracking
- Consolidation TCN will be based on status of unit module with earliest required delivery date – might be earlier than Delta Company's 01 Aug 2008 RDD
- Consolidation MSL will boldly display the word "Consolidation" inside border of label
- Consolidation MSL and RFID tag will be placed prominently on lead module
- Existing MSLs and RFID tags will **NOT** be removed





UNCLASSIFIED

Use Case 2: Prototype MSL - Consolidation

CONSOLIDATION						
TCN		SW81238350D001XXX				
C O N S O L I D A T I O N	From	SW8123	TAC / Type Service / Postage			
	In-the-clear Address		SZZZ			
	3 Lines Max, 35 Characters Per Line		Frt LTL			
	XXXXXXXXXX1XXXXXXXXXX2XXXXXXXXXX3XXXXX					
	Piece	1	Of 1	Weight (lb.)	Date Shipped	RDD
				7760	1090	999
				Cube (ft.)	Project	Priority
				385	9BU	1
	Ship To / POE	In-the-clear Address				
	DOV	5 Lines Max, 35 Characters Per Line				
	Abcdefg Hgijklmno Pqrstuv Wxyz					
	Abcdefg Hgijklmno Pqrstuv Wxyz					
	XXXXXXXXXX1XXXXXXXXXX2XXXXXXXXXX3XXXXX					
POD	MSL, Supply, & TCMD Data					
RMS						
FMS Case						
CKM						
DLA Data						
ABD77ZR						
Dest: 30D135						
CD:						
Spur:						
W55XGJ	Ultimate Consignee / Mark For Consignee					
	Ultimate / Mark For Consignee Address					
	5 Lines Max, 35 Characters Per Line					
	Abcdefg Hgijklmno Pqrstuv Wxyz					
	Abcdefg Hgijklmno Pqrstuv Wxyz					
	XXXXXXXXXX1XXXXXXXXXX2XXXXXXXXXX3XXXXX					





UNCLASSIFIED

Conclusion

- Benefits
 - ITV is maintained throughout the entire transportation process for all levels of interested parties (unit; BCT; losing/gaining command; transporters)
 - Consolidation/Deconsolidation can be easily done to take greatest advantage of available transportation modes/methods
 - Minimal impact to existing automated systems – builds upon established techniques/procedures





UNCLASSIFIED

Conclusion, continued

- Detractors
 - Automated systems must be able to create “Parent-Child” data relationship between new consolidation TCN and existing TCNs for multi-module shipping units
 - Label format must be revised to create the new “Consolidation” MSL





UNCLASSIFIED

Community Input

- Suggestions

- Questions





UNCLASSIFIED

Backup Slides





UNCLASSIFIED
USTRANSCOM

Data Quality





UNCLASSIFIED

Data Quality Working Group (DQWG)

- Joint Charter including USTRANSCOM, TCCs, JFCOM, and DLA
- Part of DD COI; Reports and Escalates to DSG
- Defined DQ Issue Handling Process, Tracking Tool, AKO/DKO Website
<https://www.us.army.mil/suite/page/473533>
dataquality@ustranscom.mil
- Providing Governance, Visibility, & Coordinated DQ Issue Management
 - Identify and maintain **executive sponsorship** of Data Quality (DQ) within USTRANSCOM
 - Establish and implement the **DQWG Business Rules**
 - Promote DQ **Best Practices** in USTRANSCOM policies, systems, and processes
 - Ensure **transparency and reliability of DQ reporting**
 - Establish **DQ Issue Team** to analyze individual DQ issues and recommend solutions to the DQWG





UNCLASSIFIED

Terminology

Responsible Party		Definition
Submitter		Individual who submits the problem to the DQ Office
USTC CDO DQ Office		Enters issue into the DQ Action Tracker and validates the Issue.
DQ Issue Team		Investigates the Issue, identifies who should resolve the Issue.
DQWG		Provides guidance and supervision to the DQ Team and DQ Office.
OPR		Responsible for the hands-on resolution of the Issue.
DSG		Distribution Steering Group - Authoritative source
Status	Qualifier	Definition
New	Submitted	A system generated status for all newly entered DQ Issues.
Working	DQ Team	<p>The status of "WORKING" is assigned by the DQ Office to all eligible DQ issues. Qualifiers provide more detail:</p> <p>Issue assigned to a DQ Team for analysis & recommendation.</p> <p>Issue sent to DQWG for review.</p> <p>Issue assigned to an individual or organization for resolution.</p>
	DQWG	
	OPR	
Hold	Escalated	<p>The "HOLD" status means the issue has been temporarily removed from "WORKING" status. Qualifiers provide more detail:</p> <p>Issue sent to DQWG or DSG for assistance.</p> <p>Held until funding decision is made or implemented.</p> <p>Pending completion of another Issue.</p> <p>Awaiting a specific date or event.</p>
	Funding	
	Other Issue	
	Schedule	
Closed	Completed	<p>The "CLOSED" status means the DQWG has determined no further action is required.</p> <p>Cause of the Issue has been fixed.</p> <p>Determined the Issue is not a Data Quality Issue.</p> <p>Management / oversight of the Issue has been changed from DQWG.</p> <p>Submitter / originator has withdrawn the Issue from the DQWG.</p> <p><i>NOTE: The Submitter and DQ Team "recommend" closure. The DQWG is the only entity that can "CLOSE" an issue.</i></p>
	Rejected	
	Transferred	
	Withdrawn	



UNCLASSIFIED

Data Quality Characteristics

