

# DEFENSE TRANSPORTATION ELECTRONIC BUSINESS COMMITTEE

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## MEETING MINUTES 23 FEBRUARY 2016

### INTRODUCTION

The Defense Transportation Electronic Business (DTEB) Committee convened 23 February 2016. The meeting was chaired by Mr. Jim DeCarli, DTEB Co-Chair, USTRANSCOM J6-SD. Meeting facilitator was Mr. Pete Varone, DTEB Support, USTRANSCOM J6-SD.<sup>1</sup>

Briefing slides from the meeting are posted on the [ITS DTEB website](#). A summary of action items from meeting is located at the bottom of these minutes.

### TECHNICAL SECRETARY REPORT (MR. VARONE)

#### X12 MEETINGS

- The last ASC X12 meeting was held 24-27 January 2016 as a standing meeting in Portland, OR; minutes for all Transportation Subcommittee and task groups have been posted to the [ASC X12 Inc. website](#) for review
- The next meeting of the ASC X12 committee is scheduled for 06-10 June 2016 as a virtual meeting for all Transportation Subcommittee and task group work

#### X12 MEETING SUMMARY

- X12I (Transportation) reviewed 25 Data Maintenance (DM) Items; majority of DMs for tracking CICA XML message development
- DM 014115 submitted on behalf of USTRANSCOM has been approved and implemented in the ASC X12 version 7030 publication
  - DM requests changes to simple data element 182 min/max attributes from 2/28 to 2/50 to support passing vessel names IAW Lloyd's Registry of Ships
- DM 013115 submitted by Norfolk Southern requests changes to simple data elements 1654 and 1655 min/max attributes from 7/7 to 7/10 to support passing GPS longitude and latitude coordinates in DDDMM.SS or DDDMMSS.SS formats
  - DM adds two new simple data elements for passing GPS longitude and latitude coordinates in decimal degrees format (e.g. 123.4567)
  - DM impacts X12 transaction sets 112, 133, 158, 212, 214, 620, and 625
  - DM remains deferred pending additional coordination by rail industry

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<sup>1</sup> Please contact the DTEB Support Staff ([transcom.scott.tcj6.mbx.DTEB-Committee@mail.mil](mailto:transcom.scott.tcj6.mbx.DTEB-Committee@mail.mil)) at USTRANSCOM if you need contact information for any of the Attendees. For a complete list of meeting attendees, members can access the DTEB meeting webpage on the [ITS DTEB Site](#). The list of attendees is at the bottom of the page.

- DM 032215 submitted by X12C related to changes in support of decoupling code value use from standard version was discussed extensively by X12C, X12I, X12J
  - Adds verbiage to Compliance in X12 documentation
  - Based on disapproval votes at the September 2016 meeting, modified verbiage was submitted for review at the January meeting
  - Subcommittees I (Transportation), F (Finance), and N (Insurance) all disapproved of the modified verbiage based on the fact that the practice of using codes across versions does not uphold the purpose of a standards setting body
- Context Inspired Component Architecture (CICA) XML development issues
  - Future of CICA XML development by ASC X12 was discussed by the X12 Steering Committee and Board of Directors
    - Determined there was insufficient ROI and that further CICA development will be discontinued
  - Isomorphic XML based on the X12 EDI standard will replace CICA XML development
  - X12I Transportation XML Task Group (TG1) was sunset
  - Three DM items were withdrawn that requested modification to the CICA design rules and development tools
  - Remaining DMs referred to the task group were passed to TG4 – Marine as they are all in support of barge industry requirements
- Elections were held for two positions on the X12 Board of Directors
  - Mr. Pete Anderson and Ms. Stephanie Fetzer were nominated and elected by acclamation
- X12, Inc. Board of Directors continues to focus on membership growth and partnership opportunities
  - Two new partnerships were announced
    - SAP
    - FIS Global
- Next X12 Meeting Issues:
  - Code Value Decoupling verbiage
  - Termination of X12G – Government Subcommittee

#### DFTS CONTRACT STATUS

- DFTS contract award was announced 30 Dec 15
- On 11 Jan 16 a protest was submitted
- Protest period of 100 days is in affect
- Work by the PM and SE IPTs as well as DOD shipper systems continues

#### REVIEW OF NOVEMBER DTEB MEETING MINUTES

- The DTEB Committee reviewed and approved the November 2015 meeting minutes as submitted

## DM & IC UPDATE (MR. ARONIN)

### DATA MAINTENANCE REVIEW

#### DM 1206

- Affected IC: 858R – Freight Bill of Lading Information
- In the H301, DE 152 at index 32-01 and in Section 6 for the Accessorial/Protective Service for Air Shipments table add the following X12 codes and associated DOD definitions (\* denotes borrowed code from DE 150):  
Code == X12 Definition == DOD Definition
  - \* 003 == Account Number Correction Charge
  - \* 020 == Address Correction
  - \* 015 == Add on - Origin == BAHRAIN Certificate of Origin Fee
  - \* 535 == Pickup - Out of Area == Pickup Beyond Service Area Charge
  - \* 593 == Re-Bill Charge
  - \* AAT == Handling Charge Tax == DJIBOUTI Harmonized System Code
  - \* DOC == Documentation Charge == DJIBOUTI Documentation Fee
  - HMA == Accessible Hazardous Material
  - HMI == Inaccessible Hazardous Material
  - \* MSG == Miscellaneous Charge
  - PDY == Pickup and Delivery Beyond Service Area Charge == Delivery Beyond Service Area Charge
- Status: Approved by member vote 13 November 2015; implemented in 858R Version 7

#### DM 1207

- Affected IC: 858R – Freight Bill of Lading Information
- In the L103, DE 122 at index 185-03 and in Section 6 add the approved X12 code 'LB - Per Pound
- Member Comments: “CMOS does not send the Freight Rate and Freight Rate Qualifier (L103) in the 858R at the DG 400 level.”
- Status: Approved by member vote 19 November 2015; implemented in 858R Version 7

#### DM 1208

- Affected IC: 219D – 3<sup>rd</sup> Party Logistics Transportation Service Request
- In the N104, DE 67 at index [13-04], add a usage note which reads "If DoDAAC/CAGE is unavailable, then N104 = 'XXXXXX' and the complete clear text name and address of the origin is required in the associated N1 loop.”
- In the N104, DE 67 at index [27-04], add a usage note which reads "If DoDAAC/CAGE is unavailable, then N104 = 'XXXXXX' and the complete clear text name and address of the ship-to is required in the associated N1 loop.”
- Status: Approved by member vote 13 November 2015; implemented in 219D Version 2

#### DM 1209

- Affected IC: 220D – 3<sup>rd</sup> Party Logistics Transportation Service Response
- In the N104, DE 67 at index [15-04], add a usage note which reads "If DoDAAC/CAGE is unavailable, then N104 = 'XXXXXX' and the complete clear text name and address of the origin is required in the associated N1 loop."
- In the N104, DE 67 at index [21-04], add a usage note which reads "If DoDAAC/CAGE is unavailable, then N104 = 'XXXXXX' and the complete clear text name and address of the ship-to is required in the associated N1 loop."
- Status: Approved by member vote 13 November 2015; implemented in 220D Version 2

#### DM 1210

- Affected IC: 858M – Truck Water Air Manifest
- In the L007, DE 184, in the 9801 DG at index 233-07, change the Cube Qualifier from 'N - Cubic Inches' to 'E - Cubic Feet' for the Total Cube of 463L Pallet Load
- Member Comments: "Recommend making the same change to the EDI 858B for DG 9801 (L007, Data Element #184)."
- Discussion:
  - The committee discussed and agreed that this change should also be applied to the 858B
    - DTEB Support Staff agreed to submit DTEB DM requesting that the 858B L007, DE 184 at index 191-07 in data group 9801 be modified to remove the code E – Cubic Inches and add the code N – Cubic Feet
  - Additionally, AMC and GATES representatives expressed concerns over the synchronized implementation of this change to ensure that all systems were expressing total cube in the same unit of measure (UOM) concurrently
    - Committee members agreed and requested that the DTEB Synchronization Task Group (STG) be convened to facilitate implementation of this change
    - The DTEB Support Staff agreed to call to order and facilitate the STG
- Status: Approved by member vote 20 November 2015; implemented in 858M Version 4
- ACTION ITEM: DTEB Support Staff to submit DTEB DM requesting that the 858B L007, DE 184 at index 191-07 in data group 9801 be modified to remove the code E – Cubic Inches and add the code N – Cubic Feet
- ACTION ITEM: DTEB Support Staff to call DTEB STG meeting to support implementation of changes to the 858M and 858B for UOM used on total cube of 463L pallets

#### DM 1211

- Affected IC: 858M – Truck Water Air Manifest
- In the NTE segment at index [40] in data group 9800 add new NTE01, DE 363 as mandatory. Add the following X12 code and DOD definition:  
Code == X12 Definition == DOD Definition  
AAA == Agent Details == Onward Mode/Method Code

- Member Comments:
  - DLMSO completely supports the intent of making the implementation of the NTE segment consistent within the 858M. However, this proposed change perpetuates two major X12 compliance problems that currently exist in the 858M IC:
    - 1) Two different codes (AAA and EMD) are used at different occurrences (indices 81-01 and 232-01 respectively) of the NTE segment in the 858M IC to convey Onward Mode/Method. This DM would also add AAA at index 40-01 to convey Onward Mode/Method.
    - 2) One code, AAA, is also used in the NTE Segment of the 858M IC to convey two different meanings: 2. a) At index 186-01, AAA conveys PPGBL Origin Carrier Name, (Personal Property Government Bill of Lading), and 2. b) at index 81-01 (and 40-01 if this DM is approved) AAA conveys Onward Mode/Method. Both of these errors already currently exist in the approved 858M IC, so the implementation of this DM will perpetuate and compound the issue. DLMSO recommends that the DTEB committee addresses these qualifier conflicts in the 858M in the CVWG.
- Discussion:
  - The DTEB Leadership and Support Staff agree that issues exists with the Onward Mode/Method Codes and have done preliminary analysis that support the DLMSO statements
  - This issue has been docketed for future DTEB Code Value Work Group (CVWG) meetings
- Status: Approved by member vote 20 November 2015; implemented in 858M Version 4

#### DM 1212

- Affected IC: 300A – Reservation (Booking) (Ocean)
- In the H301, DE152 at index [15-01] and in section 6 on the code value 'APD' add the following usage note: "Scanning is to describe the action of scanning the cargo as it relates to security procedures. This accessorial also has a price scheme associated with it."
- Status: Approved by member vote 20 November 2015; implemented in 300A Version 10

#### DM 1213

- Affected IC: 858M – Truck Water Air Manifest
- In the NTE segment at index [53] in data group 9900 add new NTE01, DE 363 as mandatory. Add the following X12 code and DOD definition:  
Code == X12 Definition == DOD Definition  
ADD == Additional Information == Additional Information
- Status: Approved by member vote 20 November 2015; implemented in 858M Version 4

#### DM 1214

- Affected IC: 858R– Freight Bill of Lading Information
- In the L102, DE 56 at index 176-12, add the following X12 codes and associated DOD definitions (\* denotes borrowed code):  
Code == X12 Definition == DOD Definition  
DA == Door-to-Airport of Debarkation

\*RD == Ramp to Door == Airport to Door

- Status: Approved by member vote 18 December 2015; implemented in 858R Version 8

#### DM 1215

- Affected IC: 858R– Freight Bill of Lading Information
- In the H301, DE 152 at index 32-01 and in Section 6 for the Accessorial/Protective Service for Air Shipments table add the following X12 codes and associated DOD definitions:

Code == X12 Definition == DOD Definition

665 == Saturday Delivery

670 == Saturday Pick-Up

- Status: Approved by member vote 11 January 2016; implemented in 858R Version 8

### **219C/220C IC USAGE (MR. VARONE)**

In follow up to DTEB Action Item # 2015009, Mr. Varone led the committee in a discussion regarding technical and functional issues that have been identified in the 219C – Transportation Service Request and 220C – Transportation Service Response ICs.

- 219C – Transportation Service Request
  - Syntactical issue:
    - Multiple N1 Loops in Delivery S5 loop does not meet X12 standard
    - Limited to 1 occurrence by X12 syntax
- 220C – Transportation Service Response
  - Functional Issue:
    - L306 at index 24 contains an implementation note that reads: “Enter the total cost of accessorial services requested (should equal the sum of each ATM02 value in the S5 segment)”
    - There is no ATM segment in X12 ver. 4010, likely this was meant to read AMT (Monetary Amount)
    - The AMT segment is in the S5/LX loop and is not used in the 220C DTEB IC
    - Accessorial services are requested in the ITA segment of the 219C with no associated cost
  - COA: Mirror functionality from DTICI/DFTS ICs
    - Requires updates to both the 219C and 220C ICs
    - Accessorial services would be requested in the ITA segment of the 219C with no associated cost
    - Accessorial services provided would be reported in the L9 segment with the associated costs for all services reported in the L3 of the 220C response
  - Syntactical Issue (applies to both the 219C and 220C):
    - Multiple N1 Loops in Delivery S5 loop does not meet X12 standard
    - Limited to 1 occurrence by X12 syntax
  - COA 1 – Make each N1 loop bounded by an S5 loop

- Results in repeated S5 loop level information for each N1 loop (repeated data in the data exchange)
  - COA 2 – Submit X12 DM to increase N1 loop repeats
    - Does not resolve the issue in the current DTEB IC
    - Requires EDI version upgrade to take advantage of new functionality
  - COA 3 – Limit use of the N1 segment
    - Delivery Location Loop containing only one of the following:  
Origin Port  
Destination Port  
OR  
Ship To
  - COA 4 – Sunset (Archive) both the 219C and 220C ICs
    - There are no reported implementations of these ICs
    - Leaves gap in DTEB functionality
- Recommendation:
  - Sunset the 219C and 220C DTEB ICs
  - Annotate technical issues in the description section
  - Submission of X12 DM to increase N1 loop repeats in both the 219 and 220 transaction sets from 1 to 10
  - Future implementation of these transaction sets be based on the X12 version supporting change
- Discussion: Members in attendance agreed with the recommendations and tasked the DTEB Support Staff with archiving the 219C and 220C ICs and submission of the X12 DM
- ACTION ITEM: DTEB Support Staff to archive the 219C and 220C DTEB ICs and coordinate submission of ASC X12 DM requesting change of the N1 loop repeats in both transaction sets from 1 to 10

## **ITV ACCESSORIAL SERVICE CODES (MR. VARONE)**

- Request initiated by NORAD and USNORTHCOM, a copy of the Request for Assistance for Improved In Transit Visibility (ITV) of CONUS Ground Movements is included as ATTACHMENT 1 to these minutes
  - Supports improving visibility of commercial line-haul movements in support of exercise and contingency deployment/redeployment operations
  - Requests additional ITV reporting using 214 – Motor Carrier Shipment Status message
    - 1, 4, or 8 hour intervals
    - Provide either GPS or City, State location and time
- Current Accessorial Codes for ITV
  - MNS
    - DOD Definition: Motor Surveillance (12-hour calls)
    - X12 Definition: Motor Surveillance Service
  - MVS
    - DOD Definition: Special Motor Surveillance Charge

- X12 Definition: Special Motor Surveillance Charge
    - Used for 2-hour reporting according to MFTURP
- The DTEB Support Staff recommended establishment of the following codes in support of the USNORTHCOM requirement:
  - Z01
    - DOD Definition: Motor Surveillance (1-hour calls)
    - X12 Definition: Protective Service Rule 25
    - DTEB Implementation Note: “Only available for use on CONUS based motor freight movements where Satellite Motor Surveillance (code SNS) is not applied.”
  - Z04
    - DOD Definition: Motor Surveillance (4-hour calls)
    - X12 Definition: Protective Service Rule 75
    - DTEB Implementation Note: “Only available for use on CONUS based motor freight movements where Satellite Motor Surveillance (code SNS) is not applied.”
  - Z08
    - DOD Definition: Motor Surveillance (8-hour calls)
    - X12 Definition: Protective Service Rule 165
    - DTEB Implementation Note: “Only available for use on CONUS based motor freight movements where Satellite Motor Surveillance (code SNS) is not applied.”
- Discussion
  - The DTEB member present agreed with the recommended codes
  - Mr. Varone noted that Mr. Phil Sadler, SDDC G3, is coordinating the effort to have this functionality implemented
  - A meeting of USTRANSCOM, USNORTHCOM, SDDC and system representatives is scheduled for 24 Feb 16
    - The Z01, Z04, and Z08 codes will be presented to the group for approval
    - If approved, the DTEB Support Staff will facilitate submission of DTEB DM requesting implementation
  - The DTEB members also discussed general issues related to establishment of accessorial services and assigning codes to those services
    - Issue of who, what USTRANSCOM entity/component, is responsible for defining and establishing an accessorial service is not clearly defined
    - DTEB Leadership is progressing this issue within USTRANSCOM
    - DTEB Committee is responsible for assigning a code to the service and implementation of that code in the applicable DTEB ICs once it is established and defined

## 858 ISSUES REPORTED BY IGC (MR. VARONE)

Mr. Varone reported that IGC has been working on design changes needed to support their 858 D/E/R modernization task order. During analysis of the work requirements in support of this effort the IGC development staff identified several issues in the DTEB ICs they required clarification on.

- IGC identified that, within the 858E IC example data, the L5 Segment was present in a Line Item Detail Loop other than the “P” or “UT”
    - Research indicated that IGC was using the segment correctly, and that the example data was incorrect
      - The commodity is currently defined in the N9 segment, should it be defined in the L5 segment instead
      - Should the L5 segment be included in all occurrences of HL loop, or just loops where HL03 = P or UT
      - Should the examples in the IC be modified
    - The committee discussed and agreed that the commodity information defined in the N9 segment was intended to be passed in that segment and that the L5 segment only applies to line item detail loops where the HL03 = P or UT
    - The committee tasked the DTEB Support Staff with modification of the 858E examples chapter to reflect correct usage
  - IGC identified that, within the 858R IC example data the FA1 loop was used in all HL loops
    - Does the FA1 loop at the detail level (in the HL loop) apply to all HL loops, or just those where HL03=I
    - Examples in the IC show the FA1 loop utilized in all HL loops
    - The committee discussed and agreed that the examples in the IC are incorrect, and that the FA1 loop at the detail level should only be used where HL03=I and the TAC/LOA differs from that identified at the header level or when no FA1 loop is present at the header level
    - The committee tasked the DTEB Support Staff with modification of the 858R examples chapter to reflect correct usage
- ACTION ITEM: DTEB Support Staff to implement correction to the 858E and 858R IC example chapters IAW the IC defined requirements

## OPEN DISCUSSION

Mr. Pete Varone brought forward a discussion item regarding the International Maritime Organization mandatory amendments to the International Convention for the Safety of Life at Sea (SOLAS). A copy of the SOLAS guidelines is included in ATTACHMENT 2 of these minutes.

- IMO SOLAS Requirement
  - Purpose of SOLAS amendment: to obtain accurate gross weight of packed containers prior to loading aboard ship

- Requires shipper to provide verified gross container weight to ocean carrier and port terminals
- SOLAS amendments were adopted in November 2014 and enter in to force on 1 July 2016
- Discussion
  - This issue was brought forward to make DTEB Committee members aware of the requirement
  - DTEB Leadership and Support Staff are coordinating with TCERC, Mr. Tim Boemecke, as well as other USTRANSCOM and DOD components to identify any applicable change requirements within the DTEB ICs
  - In addition to the requirement to pass verified gross weight, one of the requirements outlined in the SOLAS guidelines (attached) is for the shipping entity to identify the party (person) who has verified the weight and to include their signature
    - Current capabilities do not support passing a physical or digital signature via electronic data exchanges
  - Concerns were raised regarding the 01 Jul 16 enforcement date
    - This concern is being addressed by the TCERC group working on this issue and is a shared concern by commercial industry shippers

Ms. Laura Campbell, SDDC G6, brought forward a discussion item on Container Service Codes. The issue is related to implementation notes and data element source information on the Y208, data element 464 in the 300A IC.

- In the 300 IC (Y208), it states:
  - These are the lading terms, MILSTAMP Codes, as described in the Code Source 350, Defense Logistics Management System Manual. This manual can be obtained from the Defense Logistics Management Standards Office.
  - SOURCE: Defense Logistics Management System Manual Volume 1, Concepts and Standards DoD 4000.25-M, Vol. 1 available from DLMS, J-673, Suite 1834 Defense Logistics Management Standards Office Defense Logistics Agency, J-6
- DTEB members confirmed that the Container Service Codes are comprised of values in positions 15-17 of the TCN
  - Rules regarding these codes is identified in the Defense Transportation Regulation (DTR), 4500.9-R-Part II, Appendix L
- DTEB Committee tasked the DTEB Support Staff to coordinate with SDDC G6 on DTEB DM to correct implementation notes in the DTEB IC and submission of X12 DM to correct the code source
- ACTION ITEM: DTEB Support Staff to coordinate with SDDC G6 on DTEB DM to correct implementation notes on the Y208 of the 300A IC and submission of X12 DM to correct the code source

## **ACTION ITEM REVIEW**

The committee was updated on the status of the following action items from the November 2015 meeting.

- Expedited Public Site Updates (AI # 2014005)
  - Status: In-Progress
  - DTEB Leadership is developing a point paper that identifies the difference between items that should be considered maintenance versus items that should be considered changes to the DTEB web site
  - The intent is to present to the CIO Forum the issues with posting items that should be considered maintenance to the public domain and request a waiver from the Gatekeeper process for those items
  - Currently the Gatekeeper review process cannot be bypassed and is the 'long pole' in the posting process
  
- Implementation of DTEB IC Archiving Process (AI # 2015007)
  - Status: Complete
  - Implementation of the DTEB Committee approved archiving process was completed in the production version of ITS the week of 16 Nov 15

The following is a summary of action items taken during this meeting:

- ACTION ITEM: DTEB Support Staff to submit DTEB DM requesting that the 858B L007, DE 184 at index 191-07 in data group 9801 be modified to remove the code E – Cubic Inches and add the code N – Cubic Feet
  
- ACTION ITEM: DTEB Support Staff to call DTEB STG meeting to support implementation of changes to the 858M and 858B for UOM used on total cube of 463L pallets
  
- ACTION ITEM: DTEB Support Staff to archive the 219C and 220C DTEB ICs and coordinate submission of ASC X12 DM requesting change of the N1 loop repeats in both transaction sets from 1 to 10
  
- ACTION ITEM: DTEB Support Staff to implement correction to the 858E and 858R IC example chapters IAW the IC defined requirements
  
- ACTION ITEM: DTEB Support Staff to coordinate with SDDC G6 on DTEB DM to correct implementation notes on the Y208 of the 300A IC and submission of X12 DM to correct the code source

REMINDER: All action items are posted on the ITS DTEB web site and updated as work is progressed or reported to the DTEB Support Staff.

## **WRAP UP, NEXT STEP, NEXT MEETING**

- Next Meeting  
19 July 2016  
Location: Scott AFB, IL area with DCS and bridge line virtual options provided
- The meeting was adjourned at 1025L hours

**ATTACHMENT 1:**

**NORAD & USNORTHCOM MEMO – REQUEST FOR ASSISTANCE FOR  
IMPROVED IN TRANSIT VISIBILITY (ITV) OF CONUS GROUND MOVEMENTS**



**NORTH AMERICAN AEROSPACE DEFENSE COMMAND  
AND  
UNITED STATES NORTHERN COMMAND**



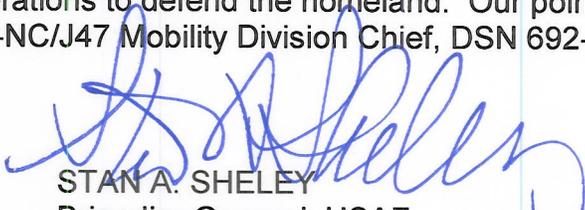
MEMORANDUM FOR HQ USTRANSCOM J5/J4

3 February 2016

FROM: NORAD and USNORTHCOM J4  
250 Vandenberg Street, Suite B016  
Peterson AFB CO 80914-3816

SUBJECT: Request for Assistance for Improved In Transit Visibility (ITV) of CONUS  
Ground Movements

1. NORAD and USNORTHCOM force deployments in support of Defense Support of Civil Authorities (DSCA), Homeland Defense (HD) operations and exercises have exposed several gaps in the DOD ability to obtain ITV of ground movements (CONUS); specifically, commercial line-haul, organic, and military convoys. This operational level issue has been identified as a N-NC Gap through the Joint Capability Integrated Development System (JCIDS) process, is at the Joint Requirements Oversight Council (JROC) level as Joint Combat Capabilities Assessment (JCCA) #4123 with USTRANSCOM as the DOD lead, and is on the N-NC Commander's Master Gap List (MGL).
2. In support of improving visibility of Commercial Line-haul movements when in support of NORAD and USNORTHCOM exercise and contingency deployment/redeployment operations, NORAD and USNORTHCOM requests additional Electronic Data Interface (EDI) services under an accessorial (as outlined below and in attachment 2) that will provide support to shippers in response to CONUS unit moves, emergencies, natural disasters, or other situations as required. The accessorial service for a commercial line-haul shipment may be for every 1 hour, 4 hours, or 8 hours. These EDI 214 Motor Carrier Shipment Status Message transactions shall provide a city and state location with a date and time to Integrated Data Environment (IDE)/Global Transportation Network (GTN) Convergence (IGC).
3. See attachment 1, NORAD and USNORTHCOM ITV Requirements Documents memo for additional justification to move forward with this effort.
4. We appreciate your support of our operations to defend the homeland. Our point of contact is Colonel David D. Baldessari, N-NC/J47 Mobility Division Chief, DSN 692-8319.

  
STAN A. SHELEY  
Brigadier General, USAF  
Director of Logistics and Engineering

Attachments:

1. N-NC J4 Memo, 1 Apr 11
2. Recommended verbiage for requested EDI accessorial services

cc:  
HQ SDDC G3



**NORTH AMERICAN AEROSPACE DEFENSE COMMAND  
AND  
UNITED STATES NORTHERN COMMAND**



1 April 2011

**MEMORANDUM FOR JOINT STAFF J4**

**FROM: NORAD and USNORTHCOM J4  
250 Vandenberg St Ste B016  
Peterson AFB CO 80914-3816**

**SUBJECT: Requirements Document for Improved In-Transit Visibility (ITV) of CONUS  
Ground Movements**

1. **BACKGROUND.** NORAD and USNORTHCOM established an ITV Working Group (WG) in order to help resolve surface (ground) movement ITV issues arising during NORAD and USNORTHCOM contingency operations. Membership included deployment subject matter experts from USNORTHCOM, Joint Staff J4, USTRANSCOM, USJFCOM, and the Services. NORAD and USNORTHCOM hosted the initial ITV WG session in June 2010 which determined a need to formally map out the CONUS surface deployment process, focusing on the deployment systems already used by each of the Services to support the deployment process. This process map was completed in October 2010 and clearly identified where the redundancies/gaps and shortfalls reside within our current systems and processes. Additionally, the WG members from Joint Staff, USTRANSCOM, and USJFCOM recommended that NORAD and USNORTHCOM submit this ITV requirements document, based on the gaps identified during the mapping process, to the Joint Staff.

2. **OPERATIONAL CAPABILITY REQUIREMENT.** NORAD and USNORTHCOM require reliable and responsive ITV for movements of personnel and cargo in support of all Command exercises, planned operations, and no-notice contingency operations. NORAD and USNORTHCOM are seeking the ability to confirm transportation closure in order to ensure the joint force commander can adequately assess force closure. Transportation closure is defined per Joint Pub 1-02 as, the process of a unit arriving at a specified location. It begins when the first element arrives at a designated location, e.g., port of entry and/or port of departure, intermediate stops, or final destination, and ends when the last element does likewise. For the purposes of studies and command post exercises, a unit is considered essentially closed after 95 percent of its movement requirements for personnel and equipment are completed. Force Closure is defined in joint doctrine as: the point in time when a supported joint force commander determines that sufficient personnel and equipment resources are in the assigned operational area to carry out assigned tasks. Recent USNORTHCOM operations providing support to civil authorities highlight several serious gaps in the DOD process to track the movement of resources within the CONUS Area of Responsibility (AOR). Primarily, these gaps are related to a lack of ITV of ground movements; specifically, commercial linehaul and military convoy. Current doctrine, policy and automated systems do not support the NORAD and USNORTHCOM requirement to provide reliable and responsive ITV for these movements.

### 3. GAPS.

a. The OPLAN ULN is a primary identifier within the Time-Phased Force and Deployment Data (TPFDD) that defines a portion of the operational capability. Presently, there is no mandatory Unit Line Number (ULN) field in the Cargo Movement Operational System (CMOS), Transportation Coordinator's Automated Information for Movement System II (TCAIMS-II), Marine Air-Ground Task Force (MAGTF) Deployment Support System Version II (MDSS II), or the Global Freight Management (GFM) System; example: "If" Transportation Control Number (TCN) position 15 is "0", CMOS requires ULN in position 2-8 (per DTR Vol III Mobility; Appendix H, Table: H-1 (page III-H-1), dated August 2008); however, not all TCNs have the 15<sup>th</sup> position of "0" (i.e. Army). Therefore, once the load/personnel arrive at destination, there is no ULN on the Commercial Bill of Lading (CBL) or Convoy Movement Order (CMO), nor is the shipment ULN linked to Service used system (TC-AIMS II, CMOS, MDSS II), or GFM.

b. DOD use of Radio Frequency (RF) technology in support of CONUS surface movements/deployments is minimal at best since current DOD policy does not require use of tags for CONUS moves; additionally, there is only limited interrogation of shipment capability during loading and movement of the shipment. Limited use of RF technology and no mandated ULN tracking results in little to no visibility during actual movements, and no operational connection to the transportation conveyance. OSD RFID Memorandum, 30 July 2004, attachment 1 requires Active RFID tagging of unit move, sustainment and retrograde level 4 containers, pallets and major end items to and from OCONUS ports. There is no requirement to tag in CONUS.

c. Services currently use the Defense Tracking Transportation System (DTTS) to provide tracking of commercial shipments identified as high visibility (i.e., movements of Arms, Ammunition & Explosives (AA&E)). DTTS offers excellent ITV but is expensive and used only for specialized shipments.

d. When equipment/personnel are in transit, the commercial carrier generates a report and forwards it to the losing unit; currently, this report is not forwarded to higher level headquarters, and ITV is not maintained.

e. Electronic Data Interchange (EDI) transactions are not timely from shipping company to Service automated systems to the Integrated Data Environment (IDE) Global Transportation Network (GTN) Convergence (IGC) for the purposes of NORAD and USNORTHCOM during a stateside contingency. Commercial carriers report CBL pick-up messages via EDI 214. Per USC 06 (5 April 2010) para 3.A.10: The contractor shall submit all reports within 24 hours of accomplishment or when the carrier has received the booking details and/or lift information from the US Government.

f. The Services transportation automated systems of choice (i.e. TC-AIMS II – Army, CMOS – Air Force, MDSS II – Marines) currently do not migrate data into Joint Operation Planning Execution System (JOPES), the main system for operations planning. Once these systems acquire the capability to link ULNs (Gap a.), they will still require the capability to automatically update the status of that ULN in JOPES. Per JOPESREP CJCSM 3150.16B, dated 1 December 2008; Surface moves validated in JOPES by the following codes are updated manually in execution, not via machine to machine interface: LG=Land via Surface

Deployment Distribution Command (SDDC) arranged transport, LH=Land via organic (unit) vehicles, LM=Land via Service transport not under control of COCOM or arranged by SDDC, LP=Land via Service arranged transport not under control of COCOM or arranged by SDDC, to include Petroleum, Oil, Lubricants (POL) via Pipeline.

4. IMPACTS. During NORAD and USNORTHCOM supported contingency operations, the timeline to identify, load, move and receive the necessary cargo and personnel is normally greatly reduced compared to those of other COCOMs, i.e. hours/days compared to weeks/months. The gaining unit command structure (typically a Joint Task Force (JTF) established within the Joint Operating Area (JOA) requires the immediate visibility of shipments to anticipate appropriate actions in preparation for mission execution. Although the requirement to track unit movements of equipment and supplies, and associate operational details about the cargo with the movement currently exists, we lack policy, systems and/or processes to track this discipline that will eliminate the JTF's current visibility gap.

a. Systems currently in place could be modified to close much of the outlined capability gap. However, a lack of consistency of use, a lack of universal standards, and a lack of data linkages and/or functionality in key systems make it a challenge for users to leverage the multiple sources of data to capture the necessary ITV. The confusing and wide array of data sources and capabilities only contributes to an overall lack of understanding. The lack of linkages between the various systems in place requires that users must become proficient in multiple systems and various data architectures at best, or regress to telephone contacts at worst, in order to get information needed. Further, users' lack of this knowledge limits their visibility of these movements and causes a lack of confidence in the existing systems and capabilities.

b. Without an automated tracking and reporting capability that links Service-used automated transportation systems of choice with JOPES, NORAD and USNORTHCOM will not be able to synchronize planned transportation and force closure with actual transportation and force closure.

#### 5. REQUIREMENTS.

a. A synchronized/automated capability that will enable COCOM visibility of all Services' pax/cargo surface movements (ground-commercial line haul and military convoy) in support of NORAD and USNORTHCOM operations, as well as policy and procedures that support the use of this expanded requirement. The requirement is not for each of the Services to change the system they use, it is for an overarching automated ITV capability (at the Strategic/COCOM level) that is synchronized with the different automated ITV systems that each of the Services use.

b. An automated tracking and reporting system that links Service-used automated transportation systems of choice (TC-AIMS II, CMOS, MDSS II), and GFM, with JOPES so that NORAD and USNORTHCOM will be able to synchronize transportation closure with force closure.

c. Current written DOD doctrine and policies that direct that RFID Tags usage in support of all OCONUS Movements need to also consider CONUS movements. As written, the

emphasis for required ITV is more focused on OCONUS not CONUS movements. Doctrine/policy needs to be updated to standardize ITV requirements for both OCONUS and CONUS movements. All written policies should support the DOD AIT CONOPS for Supply, Distribution and Deployment Operations and its accompanying implementation plan.

d. Once a commercial transportation conveyance completes its mission, an automated ability to measure successful delivery to the consignee as a performance metric.

## 6. SUGGESTED SOLUTIONS.

a. Make the ULN data field available in all systems.

(1) The data layer of this problem is corrected through use of a required disciplined OPLAN ULN field (which is a prohibited combination in an unclassified system) or a Transportation Tracking Account Number (TTAN) field (planned for fielding in FY11) for each discrete movement requirement when developing a CBL or CMO within each of the Service automated systems (TC-AIMS II, CMOS, MDSS II). Additionally, determine a means to synchronize/link this OPLAN ULN/TTAN field in the CBL/CMO to the force requirement outlined within the TPFDD. The Transportation Tracking Number (TTN) project will improve shipment identification by enabling linkage of movement execution data (CBLs in GFM and CMOS and CMOs in TC-AIMS II) to the JOPES OPLAN ULN in IGC. CMOS, TC-AIMS II and GFM have TTN implementation planned for FY11. However, collecting the TTN into IGC will not update JOPES machine to machine for surface moves (ref. 2.f.) but will allow better ULN queries for improved ITV.

(2) Add ULN, company dispatch, and driver contact details to CBL process within GFM; establish "required discipline fields" (not free text) within all Service used systems for this information to become required specifically formatted input.

(3) Add GFM interface to TC-AIMS II and CMOS for automatic CBL generation (it is currently a manual process).

(4) Commercial Linehaul: The CBL process does not contain a force movement ULN data element which would be useful for tracking/synchronizing the commercial truck movement with the operational capability (load). SDDC's GFM tool creates CBLs and would require modification. Further, the current data transfer from TC-AIMS II to GFM is a hand-jam work around which leads to further data entry errors; additional "required discipline fields" (not free text), for information such as ULN and/or TTN, within the different Service systems may assist with ensuring necessary data and preventing data entry errors. Along with a policy change, an interface or service between TC-AIMS II and GFM is needed.

b. Convoy movements: While the legacy CMO tool migrates from the National Guard's Mobilization Movement Control (MOBCON) server to the Army's TC-AIMS II, develop an interim capability to export the CMOs from TC-AIMS II to the IGC.

c. Reception phase (upon arrival in JOA): Develop an automated in-check at Joint Reception Center (perhaps interfaced with a dashboard in IGC/Single Mobility System (SMS)/Integrated Surface Distribution and Data Cleansing (iSDDC)) to provide COCOM visibility of transportation and force closures.

d. Consider use of satellite tracking "accessorial" option in tender contracts for NORAD and USNORTHCOM contingencies much like the current AA&E sustainment process uses SDDC's Defense Transportation Tracking System (DTTS) via the Intelligent Road/Rail Information Server (IRRIS). This option could be used for GFM/Defense Transportation Coordination Initiative (DTCI) or CMOS-ordered CBL line haul moves.

e. Update doctrinal/policy manuals/documents to ensure that CONUS ITV Service requirements mirror OCONUS requirements.

f. Identify and standardize systems key to the ITV architecture; establish data linkages so users have easier access to data using as few systems as possible; implement emerging technologies to enhance and make more efficient current capabilities. The ability to consolidate shipment data into one system would greatly improve access to ITV information.

7. ORGANIZATIONAL CONCEPT. SDDC/USTRANSCOM, JFCOM, PM BCS3, PM TIS, PM MTS, PM J-AIT implement necessary system changes as outlined above.

8. PROCUREMENT OBJECTIVE. Incremental improvements are acceptable.

9. AVAILABILITY. Envision requirements being met through incorporating available technology and enhancing system's capabilities.

10. POINT OF CONTACT. NORAD and USNORTHCOM J47 Mobility Division, Mr. Adam Munn, DSN 692-0798; Comm (719)554-0798; NIPR: [adam.munn@northcom.mil](mailto:adam.munn@northcom.mil).



MATTHEW J. DZIALO  
Brig Gen, ANG  
Director of Logistics and Engineering

2 Attachments:

1. Map of CONUS Deployment Process
2. NORAD and USNORTHCOM ITV Requirements Brief

1.



(U) CONUS Ground  
Movement OV-6c (v 1 Requirements as of 2

2.



N-NC ITV

cc:

USNORTHCOM J3  
USTRANSCOM J3  
USTRANSCOM J5/4  
USJFCOM J3/4

Recommended verbiage for requested EDI accessorial services:

Services under this accessorial will provide support to shippers in response to CONUS unit moves, emergencies, natural disasters, or other situations as required. Accessorial service for a commercial line haul shipment may be for every 1 hour, 4 hours, or 8 hours. These EDI 214 Motor Carrier Shipment Status Message transactions shall provide a city and state location with a date and time to IGC.

1. When directed by the Contracting Officer, the Contractor shall support EDI 214 Motor Carrier Shipment Status Message reporting for all freight the shipper would require additional visibility during transit

- a. GPS location every 1 hour
- b. City/State location every 1 hour

2. When directed by the Contracting Officer, the Contractor shall support EDI 214 Motor Carrier Shipment Status Message reporting for all freight the shipper would require additional visibility during transit

- a. GPS location every 4 hours
- b. City/State location every 4 hours

3. When directed by the Contracting Officer, the Contractor shall support EDI 214 Motor Carrier Shipment Status Message reporting for all freight the shipper would require additional visibility during transit

- a. GPS location every 8 hours
- b. City/State location every 8 hours

**ATTACHMENT 2:**

**WORLD SHIPPING COUNCIL MEMO – GUIDELINES FOR IMPROVING SAFETY AND  
IMPLEMENTING THE SOLAS CONTAINER WEIGHT VERIFICATION  
REQUIREMENTS**



# **Guidelines for Improving Safety and Implementing the SOLAS Container Weight Verification Requirements**

*July 1, 2015*

## **Summary**

In November 2014, the International Maritime Organization (IMO) adopted mandatory amendments to the International Convention for the Safety of Life at Sea (SOLAS) Chapter VI, Part A, Regulation 2 - Cargo information. The SOLAS convention is applicable global law. The SOLAS amendments become effective on 1 July 2016 for packed containers received for transportation (gate-in or off-rail). They place a requirement on the shipper of a packed container, regardless of who packed the container, to verify and provide the container's gross verified weight to the ocean carrier and port terminal representative prior to it being loaded onto a ship. A verified container weight is a condition for loading a packed container aboard a vessel for export. The vessel operator and the terminal operator are required to use verified container weights in vessel stowage plans and are prohibited from loading a packed container aboard a vessel for export if the container does not have a verified container weight.

This document provides an outline of what the implementation of the SOLAS amendments requires of the various commercial parties.

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## **1. Introduction**

1.1 In order to address safety problems at sea and on shore arising from container shipments that have incorrect weight declarations, the International Maritime Organization (IMO) adopted amendments to the Safety of Life at Sea (SOLAS) Convention, Chapter VI Regulation 2 – Cargo information regarding a mandatory container gross weight verification, together with associated guidelines published as MSC.1/Circ. 1475 (hereinafter referred to as the IMO Guidelines).<sup>1</sup>

1.2 The SOLAS amendments were adopted in November 2014 and will enter in to force on 1 July 2016. The intervening period should be considered to be the transition or planning period. All regulated parties need to be prepared to implement and abide by the container weight verification requirements by 1 July 2016. This period should also allow time for regulated parties to prepare for required process and documentation changes and to test information transmission enhancements in advance of the effective date.

1.3 The effect of these requirements on containerized supply chains is that the verification of the gross weight of a packed export container will be required before the container is loaded aboard a ship. To ensure compliance with the SOLAS amendments, participants within the supply chain (especially shippers, carriers, and terminal operators) will need to establish and implement processes to ensure that the verified container weights are provided to the necessary parties in a timely fashion and are used by the terminal operator and vessel operator in the vessel's container stowage plan.

1.4 These Guidelines have been drafted by the World Shipping Council, in consultation with its member companies, as advice on implementing the SOLAS amendments. These Guidelines identify elements both of the regulatory requirements and of a non-regulatory nature that companies with commercial roles and activities within the international containerized transport supply chain will need to consider.

## **2. Scope**

2.1 Unless specified in paragraph 2.2, the SOLAS requirements to verify the gross weight of a packed export container apply to all packed containers to which the IMO's Convention for Safe Containers (CSC) applies and which are to be loaded onto any ship in international maritime traffic.

2.2 The provisions of SOLAS Chapter VI, Part A, Regulation 2 do not apply to:

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<sup>1</sup> The text of both the SOLAS amendments and the IMO Guidelines Regarding the Verified Gross Mass of Container Carrying Cargo may be accessed via web links found in Section 10 below, page 10. The terms "gross mass" and "gross weight" are interchangeable.

- (i) A packed container on a chassis or trailer to be driven on a ro-ro ship which is engaged on short international voyages;<sup>2</sup>
- (ii) Cargo items tendered by a shipper to the master for packing into a container already on board the ship; or
- (iii) "Offshore containers" to which the CSC, according to the IMO Guidelines for the approval of offshore containers handled in open seas (MSC/Circ.860) and the IMO Revised recommendations on harmonized interpretation and implementation of the International Convention for Safe Containers, 1972, as amended (CSC.1/Circ.138/Rev.1), does not apply.

2.3 No provision or agreement in a contract of sale, a transportation contract, or a stevedoring contract may override or conflict with the obligation to abide by the SOLAS requirements.

### **3. Main Principles**

3.1 The purpose of the SOLAS amendments is to obtain an accurate gross weight of packed containers that are moved through the supply chain prior to loading aboard the ship.

3.2 The responsibility for obtaining and documenting the verified gross weight of a packed container lies with the shipper. *SOLAS Chapter VI, Regulation 2; IMO Guidelines, paragraph 4.1.*

3.3 Verified container weights are to be used by the terminal operator and the vessel operator in ship stowage planning.

3.4 A container packed with packages and cargo items shall not be loaded onto a ship to which the SOLAS amendments apply unless the vessel master or his representative and the terminal representative have obtained, in advance of vessel loading, the verified gross weight of the container. *SOLAS Chapter VI, Regulation 2, paragraph 6; IMO Guidelines, paragraph 4.2.* Availability to both the terminal representative and to the master or his representative of the verified gross mass of a packed container sufficiently in advance to be used in the ship stowage plan is a prerequisite for the container to be loaded onto a ship to which the SOLAS regulations apply. *IMO Guidelines, paragraph 14.1*

3.5 If a packed container is received at a port facility for export without a verified gross weight, it shall not be loaded on a vessel until a verified gross weight is obtained. The measures that may be taken to obtain such a verified weight for such a container are for the commercial parties to determine. Any costs incurred by the vessel operator or terminal

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<sup>2</sup> SOLAS regulation III/2 defines "short international voyage" as an international voyage in the course of which a ship is not more than 200 miles from a port or place in which the passengers and crew could be placed in safety, and which does not exceed 600 miles in length between the last port of call in the country in which the voyage begins and the final port of destination.

operator for obtaining a verified gross weight if a shipper has failed to provide one in a timely manner and any recovery of those costs are also commercial matters for the parties to determine. *IMO Guidelines, paragraph 13.1.*

3.6 The gross weight of a packed inbound container being delivered by a SOLAS vessel to a port facility (i.e., an import or transhipped container) will be the verified container weight used by the vessel operator and port facility at the vessel's loading port. A port facility and a vessel operator do not need to re-weigh a packed inbound container that is to be transhipped if that container has been delivered by a SOLAS vessel with a verified weight from the previous leg of the voyage. *IMO Guidelines, paragraph 8.1.2.*

#### **4. Methods for obtaining the verified gross mass of a packed container**

4.1 The SOLAS regulations prescribe two methods by which the shipper may obtain the verified gross mass of a packed container.

##### **4.1.1 Method No. 1:**

- Upon the conclusion of packing and sealing a container and using calibrated and certified equipment, the shipper may weigh, or have arranged that a third party weigh, the packed container. *SOLAS Regulation, paragraph 4.1; IMO Guidelines, paragraph 5.1.1.* The scale, weighbridge, lifting equipment or other devices used to verify the gross mass of the container must meet the applicable accuracy standards and requirements of the State in which the equipment is being used. *IMO Guidelines, paragraph 7.1.*
- Method No. 1 is appropriate to use for any packed container and any kind of goods.

##### **4.1.2 Method No. 2:**

- The shipper (or, by arrangement of the shipper, a third party) may weigh all packages and cargo items, including the mass of pallets, dunnage and other packing and securing material to be packed in the container, and add the tare mass of the container to the sum of the single masses of the container's contents. *IMO Guidelines, paragraph 5.1.2.*
- The weighing equipment used to weigh the contents of the container must meet the applicable accuracy standards and requirements of the State in which the equipment is being used. *IMO Guidelines, paragraph 7.1.*
- The tare mass of the particular container is visible on the exterior of the container and should be used. *IMO Guidelines, paragraph 12.1.*
- Estimating the weight of a container's contents is not permitted.
- The party packing the container cannot use the weight somebody else has provided, except in one specific set of defined circumstances where the cargo has been

previously weighed and that weight is clearly and permanently marked on the surface of the goods.<sup>3</sup>

- Method No. 2 is “inappropriate and impractical” for “certain types of cargo items (e.g., scrap metal, unbagged grain and other cargo in bulk)” that “do not easily lend themselves to individual weighing of the items to be packed in the container.” *IMO Guidelines, paragraph 5.1.2.2.* Method No. 2 is also inappropriate for “flexitanks”. For such cargoes, Method No. 1 must be used.
- The method used for weighing the container's contents under Method No. 2 is subject to certification and approval as determined by the competent authority of the State in which the packing and sealing of the container was completed. *IMO Guidelines, paragraph 5.1.2.3.* Shippers are responsible for complying with any certification and approval requirements that may be established by the State in which the container packing is done, or, in a case where a container is packed in multiple places, any certification and approval requirements that may be established by the State where the last contents were packed into the container.

4.2 Regardless of whether Method No. 1 or Method No. 2 is used to obtain the verified weight of the container --

- The SOLAS amendments and the IMO Guidelines are clear that the shipper named on the ocean carrier’s bill of lading is the party responsible for providing the packed container’s verified gross mass. *IMO Guidelines, paragraph 5.1.3.* Thus, for example, if a freight forwarder/NVOCC is co-loading the cargo shipments of other freight forwarders in a container, the “master” forwarder named on the ocean carrier’s bill of lading is the party responsible for the accurate cargo weight verification of all the cargo and all packing or securing material from all the co-loading forwarders using the container.
- The carrier and terminal operator may rely on a shipper’s signed container weight verification to be accurate. The carrier and the terminal operator are not responsible

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<sup>3</sup> The exception is as follows: “Individual, original sealed packages that have the accurate mass of the packages and cargo items (including any other material such as packing material and refrigerants inside the packages) clearly and permanently marked on their surfaces, do not need to be weighed again when they are packed into the container.” *IMO Guidelines, paragraph 5.1.2.1 (underlining added).* This does not permit estimating the cargo weight, but permits using accurate weights that have been previously derived from weighing the product and that are clearly and permanently marked on individual, original sealed packages. For example, a shipper of identical television sets whose individual cartons are marked by the manufacturer with the shipping weight could calculate the shipment’s weight by multiplying the number of television sets in the container by the weight of an individual set, and then adding that weight to the combined calculated weight of the packaging, pallets, packing and bracing material used and the container’s tare weight. This approach has four required elements. It only applies to: 1) original, sealed packages, 2) that have been previously weighed, 3) with the accurate mass clearly and permanently marked on their surfaces, and, 4) such weights being added to the calculated weight of all packing, securing and other material that may have been used in the packing of the container.

for verifying the shipper's weight verification. Nor do the SOLAS amendments or IMO Guidelines require a carrier or terminal operator to verify that a shipper providing a verified weight according to Method 2 has used a method which has been certified and approved by the competent authority of the jurisdiction in which the packing and sealing of the container was completed. However, for the shipper's weight verification to be compliant with the SOLAS requirements, it must be "signed", meaning a specific person representing the shipper must be named and identified as having verified the accuracy of the weight calculation on behalf of the shipper.<sup>4</sup>

- Weights obtained by weighing the entire packed container under Method 1 or by weighing the contents of the container and adding those weights to the container tare weight under Method 2 are to be as accurate as the scales or weighing devices used, which must meet the applicable accuracy standards and requirements of the State in which the equipment is being used. Some cargo products may incur normal, minor changes in weight from the time of packing until delivery (e.g., due to evaporation, humidity changes, ice melt from fresh food products packed in ice, etc.) and some containers' tare weight may change over time and vary somewhat from the tare weight painted on the container; however, these variations should not present safety concerns.
- The party or parties packing the container should follow the provisions of the IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code) in relation to load distribution and safe packing of the container. (See, page 11 for a link to the CTU Code and CTU Code Informative Materials.)

4.3 A shipper's participation or approval under a Customs authority's Authorized Economic Operator (AEO) or similar program does not modify or exempt the shipper from required compliance with the SOLAS requirements. Such status might be a relevant factor in a State's certification and approval requirements for Method No. 2 shippers. Shippers should be aware of any such applicable national requirements.

4.4 If a carrier or terminal operator has reason to believe that the verified weight of the container provided by the shipper is significantly in error, they may take such steps as may be appropriate in the interest of safety to determine what the accurate weight is. The terms of such arrangements and the recovery of the costs involved in any steps for obtaining an accurate weight are commercial matters for the parties to address.

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<sup>4</sup> "The shipping document shall be: .1 signed by a person duly authorized by the shipper; and .2 submitted to the master or his representative ...." *SOLAS Chapter VI, Regulation 2, paragraph 5*. "This document can be part of the shipping instructions to the shipping company or a separate communication (e.g., a declaration including a weight certificate produced by a weigh station)." *IMO Guidelines, paragraph 2.1.13*. "[T]he document should clearly highlight that the gross mass provided is the "verified gross mass" as defined in paragraph 2.1." *IMO Guidelines, paragraph 6.1*. "Irrespective of its form, the document declaring the verified gross mass of the packed container should be signed by a person duly authorized by the shipper. The signature may be an electronic signature or may be replaced by the name in capitals of the person authorized to sign it." *IMO Guidelines, paragraph 6.2*.

## **5. Documentation**

5.1 The SOLAS regulations require the shipper to verify the gross mass of the packed container using Method No. 1 or Method No. 2 and to communicate the verified gross mass in a shipping document. This document can be part of the shipping instructions to the shipping company or a separate communication (e.g., a declaration including a weight certificate produced by a weigh station using calibrated and certified equipment on the route between the shipper's origin and the port terminal). In either case, the document should clearly highlight that the gross mass provided is the "verified gross mass". The verified weight should be expressed in kilograms or pounds, depending on which measure is used in that jurisdiction. Electronic methods of transmission such as Electronic Data Interchange (EDI) or Electronic Data Processing (EDP) may be used. *IMO Guidelines, paragraph 6.3.*

5.2 Irrespective of its form, the document declaring the verified gross mass of the packed container must be signed by a person duly authorised by the shipper. The signature may be an electronic signature or may be replaced by the name in capitals of the person authorised to sign it. *IMO Guidelines, paragraph 6.2.*

5.3 Any discrepancy between a packed container's gross mass provided to a carrier by a shipper prior to the container's weight verification and its verified gross mass should be resolved by use of the verified gross mass. *IMO Guidelines, paragraph 9.1.* If a port terminal addresses an uncertainty about the gross mass of a packed container by weighing the container, the weight obtained by the port facility should be used for vessel stowage planning. *IMO Guidelines, paragraph 9.2 and 13.1.*

5.4 The shipper's container weight verification shall be made available to the terminal operator and to the master and to appropriate government officials upon request.

## **6. Information flow: Shipper, carrier and terminal interfaces**

6.1 The SOLAS amendments are clear in assigning shippers', carriers' and terminal operators' responsibilities. The shipper is responsible for providing an accurate "verified gross mass" for each packed container it tenders to the carrier or its terminal representative, regardless of who actually packs the container. The vessel operator and the terminal operator are responsible for using verified gross weights in vessel stow planning and must not load a packed container aboard a vessel for export without a verified gross weight. These are regulatory obligations.

6.2 In order to implement the SOLAS regulatory obligations and to ensure the efficient and smooth flow of commerce, the parties in the supply chain will need to make arrangements for the timely transmission and exchange of verified container weight information. These are commercial and operational requirements, not regulatory requirements.

6.3 SOLAS requires that the container weight verification information be submitted sufficiently in advance of vessel loading to be used in the preparation of the ship stowage

plan. *IMO Guidelines, paragraph 6.3.2.* It is essential that the container's verified gross weight be obtained by the vessel operator and the terminal operator before a packed export container is physically loaded on to a ship.

6.4 Carriers will provide shippers with "cut-off times" within which the carrier must receive the required container weight verification from the shipper for ship stowage planning. These cut-off times may vary by carrier, may vary depending on the operational procedures or requirements of different terminal operators, and may vary from port to port. Shippers should learn of such documentation cut-off times from the carrier with whom they are doing business.

6.5 Where container weight verification is performed outside a container terminal, carriers shall transmit shippers' container weight verifications to the terminal operator, per agreed formats and standards, in a timely manner so that the terminal operator has this information upon the arrival of the packed container at the terminal.

6.6 Terminal operators will need to transmit to the carrier, per agreed formats and standards, in a timely manner any shipper provided container weight verification that the shipper provides to the terminal upon delivery of the packed container to the terminal operator, as well as weight verifications that occur when a terminal operator weighs a packed container on behalf of the shipper. See, Section 6.7 below.

6.7 Terminal operators and carriers will need to jointly decide in advance how they intend to handle packed containers that are received by a terminal operator for export when: a) the carrier has not informed the terminal operator of the container's verified weight, or b) when the shipper has not provided the carrier or terminal operator with the packed container's verified container weight.

6.8 If a terminal operator makes arrangements for determining the verified gross mass of a packed container that is delivered to the port by a shipper without a verified gross mass, the cost for such service will have to be borne according to the terms of the commercial arrangements among the affected parties, with the recognition that the SOLAS amendments place the obligation on the shipper to provide the verified weight in the first instance. A shipper should recognize that, if it fails to provide a verified container weight as called for by the SOLAS amendments and such failure requires a terminal operator to use Method No. 1 to obtain a verified container weight, there will be a cost for such services that the affected parties will need to address.

6.9 With respect to vessel sharing arrangements (VSAs) where more than one ocean carrier is using the vessel to transport goods, the vessel operator is responsible for the vessel stowage and for the vessel's compliance with SOLAS requirements. Each VSA partner is responsible for timely transmission of verified container weights for all packed containers to be loaded to the terminal operator and to the vessel operator.

6.10 The final vessel stow plan should include a check mark or notation that allows the master to see that each packed container in the stow plan has a verified weight, and the stow plan shall include the verified weights for every packed container aboard.<sup>5</sup>

## **7. Containers exceeding their maximum gross mass**

SOLAS regulation VI/5 requires that a container not be packed to more than the maximum gross mass indicated on the Safety Approval Plate under the IMO's Convention for Safe Containers (CSC), as amended. A container with a gross mass exceeding its maximum permitted gross mass may not be loaded onto a ship.

In addition to not packing a container beyond its maximum gross mass, the party packing a container should be aware of and abide by cargo weight distribution and cargo securing requirements for the particular type(-s) of cargo packed into the container. See, CTU Code referred to in Section 9 below.

## **8. Definitions**

For the purpose of these Guidelines:

*Calibrated and certified equipment:* means a scale, weighbridge, lifting equipment or any other device, capable of determining the actual gross mass of a packed container or of packages and cargo items, pallets, dunnage and other packing and securing material, that meets the accuracy standards and requirements of the State in which the equipment is being used.

*Cargo items:* has the same general meaning as the term "cargo" in the International Convention for Safe Containers, 1972, as amended (hereinafter referred to as "the CSC"), and means any goods, wares, merchandise, liquids, gases, solids and articles of every kind whatsoever carried in containers pursuant to a contract of carriage. However, ship's equipment and ship's supplies, including ship's spare parts and stores, carried in containers are not regarded as cargo.

*Carrier:* The party who, in a contract of carriage, undertakes to perform or to procure the performance of carriage by sea.

*Container:* has the same meaning as the term "container" in the CSC and means an article of transport equipment:

- (a) of a permanent character and accordingly strong enough to be suitable for repeated use;
- (b) specially designed to facilitate the transport of goods, by one or more modes of transport, without intermediate reloading;

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<sup>5</sup> There may be a limited period of time after July 1, 2016 when electronic messaging software (EDI) changes to implement this capability will be in transition.

- (c) designed to be secured and/or readily handled, having corner fittings for these purposes; and
- (d) of a size such that the area enclosed by the four outer bottom corners is either:
  - (i) at least 14 m<sup>2</sup> (150 sq. ft.); or
  - (ii) at least 7 m<sup>2</sup> (75 sq. ft.) if it is fitted with top corner fittings.

*Contract of carriage:* means a contract in which a shipping company, against the payment of freight, undertakes to carry goods from one place to another. The contract may take the form of, or be evidenced by a document such as sea waybill, a bill of lading, or multi-modal transport document.

*Gross weight or gross mass:* means the combined weight of a container's tare weight and the weights of all packages and cargo items, including pallets, dunnage and other packing material and securing materials packed into the container (see also "*Verified gross mass*").

*Package:* means one or more cargo items that are tied together, packed, wrapped, boxed or parcelled for transportation. Examples of packages include, but are not limited to, parcels, boxes, packets and cartons.

*Packed container:* means a container, as previously defined, loaded ("stuffed" or "filled") with liquids, gases, solids, packages and cargo items, including pallets, dunnage, and other packing material and securing materials.

*Packing material:* means any material used or for use with packages and cargo items to prevent damage, including, but not limited to, crates, packing blocks, drums, cases, boxes, barrels, and skids. Excluded from the definition is any material within individual sealed packages to protect the cargo item(s) inside the package.

*Securing material:* means all dunnage, lashing and other equipment used to block, brace, and secure packed cargo items in a container.

*Ship:* means any vessel to which SOLAS chapter VI applies. Excluded from this definition are roll-on/roll-off (ro-ro) ships engaged on short international voyages where the containers are carried on a chassis or trailer and are loaded and unloaded by being driven on and off the ship.

*Shipper:* means a legal entity or person named on the bill of lading or sea waybill or equivalent multimodal transport document (e.g., a "through" bill of lading) as shipper and/or who (or in whose name or on whose behalf) a contract of carriage has been concluded with a shipping company. The shipper may also be known as the sender.

*Shipping document:* means a document used by the shipper to communicate the verified gross weight of the packed container. This document can be part of the shipping instructions to the shipping company or a separate communication (e.g., a declaration including a weight certificate produced by a weigh station).

*Tare weight:* means the weight of an empty container that does not contain any packages, cargo items, pallets, dunnage, or any other packing material or securing material.

*Terminal representative:* means a person acting on behalf of a legal entity or person engaged in the business of providing wharfage, dock, stowage, warehouse, or other cargo handling.

*Verified gross mass:* means the total gross weight of a packed container as obtained by one of the methods described in Section 4 of these Guidelines.

## **9. Supplemental reference and source material**

- The full text of the SOLAS regulations and the IMO Guidelines Regarding the Verified Gross Mass of Container Carrying Cargo (MSC.1/Circ.1474, 9 June 2014) can be found at:  
<http://www.worldshipping.org/industry-issues/safety/cargo-weight>
- The IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code) and the CTU Code Informative Materials can be found at:  
<http://www.worldshipping.org/industry-issues/safety/containers>

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