DEFENSE LOGISTICS AGENCY

Established 1961

Top 12 Defense Logistics Management Standards (DLMS) Stumpers

Delta Pelgrim
Defense Enterprise Data Standards Office
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THE NATION'S LOGISTICS COMBAT SUPPORT AGENCY

PEOPLE ★ PRECISION ★ POSTURE ★ PARTNERSHIPS WARFIGHTER ALWAYS

Common Terminology

- **X12** – One of two approved computer exchange languages used for exchanging DoD supply/logistics data.
- **Extensible Markup Language (XML)** – Second of approved computer languages used for exchanging DoD supply/logistics data.
- **Implementation Convention (IC)** – Document that defines the exchange syntax and business rules.
- **DLMS** – The combination of the ICs and the Defense Logistics Manual (DLM) 4000.25, which includes policies and procedures.
- **Proposed DLMS Change (PDC)/Approved DLMS Change (ADC**) – Suggested/proposed and approved changes to the existing ICs, DLM 4000.25, or both based upon suggestions from the supply/logistics community.
- **Defense Enterprise Data Standards Office (DEDSO)** – The DoD office that implements the DLMS.
- **Qualifier –** A bit of data that describes a secondary bit of data.

Question 1. What is DEDSO's XML based on?

Question 2. How is an X12 IC illustrated in XML?

Answer to Question 1

- While XML tags are flexible and extendable, DEDSO's XML transactions are based upon DLMS X12 – you have to understand the DLMS X12 transactions first!
- This means that just like in X12, you must send qualifiers as well as the data, and all X12 segment and loop structures must exist.

Answer to Question 2

X12 Term	XML Term
Implementation Convention	Schema
Set of Data	Instance
Translator	Parser

- Flat File (space delimited): AM1SNS1NSNNSNNSN EA00001……..
- Electronic Data Interchange: N1*Z5*M4*SNS*FR~
- XML:

<S_Name>
<E_Entity_Identifier_Code>Z5</E_Entity_Identifier_Code>
<E_Identification_Code_Qualifier>M4</E_Identification_Code_Qualifier>
<E_Identification_Code>SNS</E_Identification_Code>
<E_Entity_Identifier_Code_1>FR</E_Entity_Identifier_Code_1>
</S_Name>

Question 3. What are internal and external code lists?

Answer to Question 3 – Part 1

- Internal (part of the standard)
- External:
  - From another standard (e.g., U.S. Postal Service state codes)
  - User developed and maintained (e.g., DoD specific code lists)

Answer to Question 3 – Part 2

- External code lists have a reference or a pointer through which the standard points to the specific code list.
- The most used reference is the LM segment.
- The data element in the LM01 points directly to agency/organization code lists.
- For the DoD, pointers exist to DEDSO's DLM 4000.25 manual, the Federal Logistics Information System volumes, U.S. Army, U.S. Navy, and other Service-specific code lists.
- It is implied that by using the reference/pointer, the manual/regulations referenced contain the codes. That specific reference is not explicitly listed in the ICs.
- The codes in the external code lists are NOT listed in DLMS ICs.

LM/LQ Segments:

LM01 = Pointer to a code list/code set/agency

LQ01 = Pointer to a specific code list within the code set

LQ02 = Actual code

LM*DF
LQ*0*A01

DF points to the DLM 4000.25

0 points to the list of Document Identifier Codes (DICs)

A01 is the DIC

Question 4. What do these terms mean?: Table 1/Table 2 or Header/Detail

Answer to Question 4

842 - Nonconformance Report

This Draft Standard for Trial Use contains the format and establishes the data contents of the Nonconformance Report Transaction Set (842) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to report products and processes that do not fulfill specifications or requirements.

The Nonconformance Report Transaction Set provides the ability for the sender to report the nonconformance at the level of detail that is required. It also provides the ability to report the specific nonconformances of a component/part while identifying the assembly as the product that is in nonconformance. The Nonconformance Report Transaction Set may be used to report, initiate, or request actions related to the nonconformance being reported. Financial and accounting information is provided for reporting purposes only.

The Nonconformance Report Transaction Set has the capability to report the cause of the nonconformance and to state the proposed action to be followed to prevent a repetition of the problem.

FUNCTIONAL GROUP=**NC**
SUBCOMMITTEE=**M**

Table 1

POS	ID	NAME	REQ	MAX	REPEAT
0100	ST	Transaction Set Header	M	1	
0200	BNR	Beginning Segment For Nonconformance Report	M	1	
0300	REF	Reference Identification	O	>1	
0400	DTM	Date/Time Reference			
0500	PID	Product/Item Description			
LOOP ID - MEA					
0600	MEA	Measurements			
0700	DTM	Date/Time Reference			
0800	REF	Reference Identification			
LOOP ID - PWK					
0900	PWK	Paperwork			
1000	REF	Reference Identification			
1100	DTM	Date/Time Reference			
LOOP ID - N1					
1200	N1	Name			
1300	N2	Additional Name Information			
1400	N3	Address Information			
1500	N4	Geographic Location			
1600	REF	Reference Identification			
1700	PER	Administrative Communications Contact			

Table 2

POS	ID	NAME	REQ	MAX	REPEAT
LOOP ID - HL					**>1**
0100	HL	Hierarchical Level	M	1	
0200	LIN	Item Identification	O	1	
0300	PID	Product/Item Description	O	>1	
0400	PRS	Part Release Status	O	>1	
0500	CID	Characteristic/Class ID	O	>1	
0600	DTM	Date/Time Reference	O	>1	
0700	REF	Reference Identification	O	>1	
0750	CS	Contract Summary	O	1	
0800	QTY	Quantity	O	>1	
0900	TMD	Test Method	O	1	
1000	PSD	Physical Sample Description	O	1	
1020	PWK	Paperwork	O	>1	
LOOP ID - LM					**>1**
1040	LM	Code Source Information	O	1	
1050	LQ	Industry Code	M	>1	
LOOP ID - MEA					**>1**
1100	MEA	Measurements	O	1	
1200	DTM	Date/Time Reference	O	>1	
1300	REF	Reference Identification	O	>1	
LOOP ID - FA1					**>1**
1350	FA1	Type of Financial Accounting Data	O	1	
1360	FA2	Accounting Data	M	>1	
LOOP ID - SPS					**>1**
1400	SPS	Sampling Parameters for Summary Statistics	O	1	
1500	REF	Reference Identification	O	>1	
1600	PSD	Physical Sample Description	O	1	
LOOP ID - MEA					**>1**
1700	MEA	Measurements	O	1	
1800	DTM	Date/Time Reference	O	>1	
1900	REF	Reference Identification	O	>1	

- Header, or Table 1, typically describes the transaction.
- Detail, or Table 2, contains the actual data.

Question 5. Can I use the DoD Unit of Measure (UoM)/Unit of Issue (UoI) code lists when sending DLMS X12 and XML transactions?

NO!!!

- X12 UoM/UoI codes are internal code lists.
- There are instances where X12 UoM/UoI are different from DoD UoM/UoI codes.
- DLMS XML uses X12 code lists.
- DEDSO has a crosswalk developed.

Questions 6, 7, and 8

Detail:

	Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	LOOP ID - LX					**>1**		
	10	LX	Assigned Number	O	1			Must use
	20	N9	Reference Identification	M	>1			Must use
	30	PO1	Baseline Item Data	O	>1			Must use
*	50	PWK	Paperwork	O	1			Not Used
	60	DD	Demand Detail	O	100			Used
	70	GF	Furnished Goods and Services	O	1			Used
	80	G62	Date/Time	O	20			Used
*	90	MAN	Marks and Numbers	O	5			Not Used
	100	LIN	Item Identification	O	>1			Used
	105	MEA	Measurements	O	>1			Used
	110	G69	Line Item Detail - Description	O	>1			Used
	120	NTE	Note/Special Instruction	O	>1			Used
	LOOP ID - LM					**50**		
	130	LM	Code Source Information	O	1			Must use
	140	LQ	Industry Code	M	100			Must use
	LOOP ID - QTY					**>1**	**N2/150L**	
	150	QTY	Quantity	O	1		N2/150	Used
	*** LOOP ID - LM**					**50**		
*	160	LM	Code Source Information	O	1			Not Used
	170	LQ	Industry Code	M	100			Must use
	LOOP ID - N1					**100**	**N2/180L**	
	180	N1	Name	O	1		N2/180	Must use
	190	N2	Additional Name Information	O	2			Used
	200	N3	Address Information	O	2			Used
	210	N4	Geographic Location	O	1			Used
*	215	G61	Contact	O	5			Not Used
	LOOP ID - REF					**>1**	**N2/220L**	
	220	REF	Reference Identification	O	1		N2/220	Used
*	230	G62	Date/Time	O	10			Not Used
	240	N9	Reference Identification	O	>1			Used
	250	N1	Name	O	1			Used
*	260	R4	Port or Terminal	O	1			Not Used
	*** LOOP ID - LM**					**50**		
*	270	LM	Code Source Information	O	1			Not Used
	280	LQ	Industry Code	M	100			Must use

Using the IC table for reference:

- Question 6. How would you describe the difference between the ‘Req’ column and the ‘Usage’ column?
- Question 7. How would you describe the usage of the numbers under the ‘Pos’ column?
- Question 8. How would you describe the usage of the ‘Max Use’ column?

Answers to Questions 6, 7, and 8

Using the IC table for reference:

- Question 6. How would you describe the difference between the ‘Req’ column and the ‘Usage’ column?

  Answer: ‘Req’ is the X12 standard, ‘Usage’ is the DLMS standard.

- Question 7. How would you describe the usage of the numbers under the ‘Pos’ column?

  Answer: The numbers are your breadcrumbs to help distinguish two similar segments and their position in the IC. Note that DEDSO ICs refer to the breadcrumbs in the segment pages.

- Question 8. How would you describe the usage of the ‘Max Use’ column?

  Answer: Identify the maximum number of times that a segment can repeat.

Detail:

	Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	LOOP ID - LX					>1		
	10	LX	Assigned Number	O	1			Must use
	20	N9	Reference Identification	M	>1			Must use
	30	PO1	Baseline Item Data	O	>1			Must use
*	50	PWK	Paperwork	O	1			Not Used
	60	DD	Demand Detail	O	100			Used
	70	GF	Furnished Goods and Services	O	1			Used
	80	G62	Date/Time	O	20			Used
*	90	MAN	Marks and Numbers	O	5			Not Used
	100	LIN	Item Identification	O	>1			Used
	105	MEA	Measurements	O	>1			Used
	110	G69	Line Item Detail - Description	O	>1			Used
	120	NTE	Note/Special Instruction	O	>1			Used
	LOOP ID - LM					50		
	130	LM	Code Source Information	O	1			Must use
	140	LQ	Industry Code	M	100			Must use
	LOOP ID - QTY					>1	N2/150L	
	150	QTY	Quantity	O	1		N2/150	Used
	* LOOP ID - LM					50		
*	160	LM	Code Source Information	O	1			Not Used
	170	LQ	Industry Code	M	100			Must use
	LOOP ID - N1					100	N2/180L	
	180	N1	Name	O	1		N2/180	Must use
	190	N2	Additional Name Information	O	2			Used
	200	N3	Address Information	O	2			Used
	210	N4	Geographic Location	O	1			Used
*	215	G61	Contact	O	5			Not Used
	LOOP ID - REF					>1	N2/220L	
	220	REF	Reference Identification	O	1		N2/220	Used
*	230	G62	Date/Time	O	10			Not Used
	240	N9	Reference Identification	O	>1			Used
	250	N1	Name	O	1			Used
*	260	R4	Port or Terminal	O	1			Not Used
	* LOOP ID - LM					50		
*	270	LM	Code Source Information	O	1			Not Used
	280	LQ	Industry Code	M	100			Must use

Questions 9, 10, and 11

In the example below:

- Question 9. What do the gray boxes represent?
- Question 10. LQ segment at position 60 – Is it sent?
- Question 11. N1 segment at position 70 – Is it sent?

	*** LOOP ID - LM**					**50**	**N1/50L**	
*	50	LM	Code Source Information	O	1		N1/50	Not Used
	60	LQ	Industry Code	M	100			Must use
	LOOP ID - N1					**20**	**N1/70L**	
	70	N1	Name	M	1		N1/70	Must use
*	80	N2	Additional Name Information	O	2			Not Used
*	90	N3	Address Information	O	2			Not Used
*	100	N4	Geographic Location	O	1			Not Used
	110	G61	Contact	O	5			Used

Answers to Questions 9, 10, and 11

Question 9. What do the gray boxes represent?

Answer: The gray boxes denote the start of a loop. The box around the segments contain the segments that are in that loop.

Question 10. LQ segment at position 60 – Is it sent?

Answer: No. The entire contents of the 'box,' or the loop, is designated by the usage of the first segment. If the first segment is 'Not Used,' then the entire loop is not used.

Question 11. N1 segment at position 70 – Is it sent?

Answer: Yes. The first segment of this loop is 'Must Use,' the loop is sent. Segment G61 is optional.

	* LOOP ID - LM					50	N1/50L	
*	50	LM	Code Source Information	O	1		N1/50	Not Used
	60	LQ	Industry Code	M	100			Must use
	LOOP ID - N1					**20**	**N1/70L**	
	70	N1	Name	M	1		N1/70	Must use
*	80	N2	Additional Name Information	O	2			Not Used
*	90	N3	Address Information	O	2			Not Used
*	100	N4	Geographic Location	O	1			Not Used
	110	G61	Contact	O	5			Used

Delta's Rule of Loops

In the example below:

The LM loop is optional, but if you enter the loop the LQ is required – send either both LM/LQ, or neither.

The QTY loop is optional, but if you enter the loop, the N9 is required.

Detail:

	Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	LOOP ID - QTY					**>1**		
	10	QTY	Quantity	O	1			Used
	20	N9	Reference Identification	O	30			Must use
	40	G62	Date/Time	O	30			Used
*	50	DD	Demand Detail	O	100			Not Used
*	60	GF	Furnished Goods and Services	O	1			Not Used
	LOOP ID - LM					**10**		
	70	LM	Code Source Information	O	1			Used
	80	LQ	Industry Code	M	100			Must use
	* **LOOP ID - N1**					**>1**		
*	90	N1	Name	O	1			Not Used
*	100	N2	Additional Name Information	O	2			Not Used
*	110	N3	Address Information	O	2			Not Used
*	120	N4	Geographic Location	O	1			Not Used
*	130	G61	Contact	O	5			Not Used
	LOOP ID - FA1					**>1**		
	135	FA1	Type of Financial Accounting Data	O	1			Used
	136	FA2	Accounting Data	M	>1			Must use
	140	SE	Transaction Set Trailer	M	1			Must use

Question 12

Is this an error because the N905 and N906 are not listed in the segment listing but mentioned in the Syntax Rules?

N9 Reference Identification

Pos: 30 | Max: 10 | Detail - Optional | Loop: LIN | Elements: 3

User Option (Usage): Used
Purpose: To transmit identifying information as specified by the Reference Identification Qualifier

Syntax Rules:

1. R0203 - At least one of N902 or N903 is required.
2. C0605 - If N906 is present, then N905 is required.

Semantics:

1. N906 reflects the time zone which the time reflects.
2. N907 contains data relating to the value cited in N902.

DLMS Note:

Must use for all non-procurement source transactions to identify the transaction number.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N901	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **Code Name** TN Transaction Reference Number **DLMS Note:** *Use to identify the document number.* EVI Event Identification **DLMS Note:** *1. Use for DLA Disposition Services PMR for relocation of FMS requisitioned materiel with associated freeze action pending approval. The only applicable value for this transaction is Code F=Freeze Indicator. Refer to ADC 1156.* *2. Approved for use in X12 version 4030.* SLI Secondary Location Identifier **DLMS Note:** *1. Use in combination with purpose code Z to request further segregation below line item. SLI cannot exceed 6 alpha/numeric characters.* *2. A local code 'SLI' is established for use in the 527D, version 4010. A data maintenance action has been submitted for establishment of 'SLI- Secondary Location Identifier' in a future version.*	M	ID	2/3	Must use
N902	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Must use
N907	C040	**Reference Identifier** **Description:** To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier **DLMS Note:** *The following codes are authorized.*	O	Comp		Used

Answer to Question 12

No error

- Syntax Rules cover ALL of X12.
- If data elements are not used by this IC, they are not shown in the segment listing.
- The segment is still X12 compliant.
- You do not need to code for missing data elements.

N9*TN*123454*****N907 stuff here….

N9 Reference Identification

Pos: 30 | Max: 10 | Detail - Optional | Loop: LIN | Elements: 3

User Option (Usage): Used
Purpose: To transmit identifying information as specified by the Reference Identification Qualifier

Syntax Rules:

1. R0203 - At least one of N902 or N903 is required.
2. C0605 - If N906 is present, then N905 is required.

Semantics:

1. N906 reflects the time zone which the time reflects.
2. N907 contains data relating to the value cited in N902.

DLMS Note:
Must use for all non-procurement source transactions to identify the transaction number.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N901	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **Code Name** TN Transaction Reference Number **DLMS Note:** *Use to identify the document number.* EVI Event Identification **DLMS Note:** *1. Use for DLA Disposition Services PMR for relocation of FMS requisitioned materiel with associated freeze action pending approval. The only applicable value for this transaction is Code F=Freeze Indicator. Refer to ADC 1156.* *2. Approved for use in X12 version 4030.* SLI Secondary Location Identifier **DLMS Note:** *1. Use in combination with purpose code Z to request further segregation below line item. SLI cannot exceed 6 alpha/numeric characters.* *2. A local code 'SLI' is established for use in the 527D, version 4010. A data maintenance action has been submitted for establishment of 'SLI- Secondary Location Identifier' in a future version.*	M	ID	2/3	Must use
N902	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Must use
N907	C040	**Reference Identifier** **Description:** To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier **DLMS Note:** *The following codes are authorized.*	O	Comp		Used

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