



# Trade Support Network (TSN) Plenary Session

Committee Breakout Sessions  
USDA Cafeteria, Rooms 1 & 2

Wi-Fi: HQ – Guest  
Username: jefferson  
Password: USDAguest

April 5-7, 2016  
Washington, D.C.

# Trade Leadership Council Meeting

April 6, 2016

11:30 – 12:30 PM

Wi-Fi: HQ – Guest  
Username: Jefferson  
Password: UDSAGuest

# Lunch

12:30 – 1:30 PM

# Entry & Legal Policy Committee

April 6, 2016

1:30 – 3:30 PM

# World Customs Organization

Technical Advisory Group

April 6, 2016

3:00 – 4:00 PM

# WCO Agenda

- ❑ The World Customs Organization (WCO)
- ❑ US CBP & the WCO DM
- ❑ US CBP Trade Data Exchange
- ❑ Early Findings
- ❑ Next Steps



# The World Customs Organization (WCO)

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- Established in 1952 as the Customs Co-operation Council (CCC) is an independent intergovernmental body whose mission is to enhance the effectiveness and efficiency of Customs administrations.
- Today, the WCO represents 180 Customs administrations across the globe that collectively process approximately 98% of world trade.

# WCO Data Model (DM)

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- Provides a global standard for cross-border data requirements for the release and clearance of goods that includes a common operational vocabulary, language and syntax for Trade data.
- Has been developed in consultation with the trade and transport community and the customs agencies of the WCO's Members.
- Is based on standardized business processes described in the Revised Kyoto Convention, which requires customs administrations to request minimal data to ensure compliance with customs laws.
- Complies with international conventions on trade and transport reporting.
- Helps implement advanced reporting requirements, including the SAFE Framework of Standards.

# WCO DM (Cont'd)

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- Consists of the following components of information exchange:
  - Content: Data sets and code lists
  - Structures: Information models
  - Technical Solutions: UN/EDIFACT and XML message design
  - Context: Business process models.
- WCO DM Version 3.5 released on January 12, 2015.
  - Data Set contains 618 data elements organized into:
    - Overall Data Set (347 data elements)
    - 5 “Super Classes” of the following common concepts:
      - Party (137 data elements)
      - Location (63 data elements)
      - Document (40 data elements)
      - Transport Means (19 data elements)
      - Government Agency (12 data elements).
- WCO DM Version 3.6 to be released March / April 2016.

# WCO Data Model Project Team (DMPT)

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- The WCO Data Model is managed by the WCO Data Model Project Team (DMPT), which has established a transparent procedure and method for requests for changes, deletions, and/or additions to the WCO Data Model.
- The WCO DMPT consists primarily of technical representatives from WCO Members and other interested parties.
- The WCO DMPT meets 3-4 times per year at the WCO HQ in Brussels to evolve the WCO Data Model to meet the trade data exchange requirements of its membership.

# WCO DM Implementation

- The WCO reports that nearly 70% of its 179 Members are using the WCO Data Model in some way:

STATUS	S	P	M	IP	NA	TOTAL
Number of Countries	71	42(43)	11(14)	0(2)	55	179
% of total Number	39.7	23.5	6.1	0.0	30.7	100.0

\* ( ) is the number including double counting on the countries submitted more than one status.

*Status of adoption of the WCO Data Model Column*

S: Information systems used by the Member have been checked conformance. Tables showing conformance with the WCO Data Model have been shared with the WCO Secretariat

P: Projects involving the use of the WCO Data Model are underway or have been completed

M: Mappings of data elements national Information Systems with the WCO Data Model have been produced and (in some cases) shared with the WCO Secretariat

IP: A "My Information Package" has been published by the Member.

NA: Information regarding conformance with the WCO Data Model is not available

# Mandate for Utilizing the WCO DM

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- Utilization of the WCO DM and standard messages as the single international standard for customs reporting to replace each country's different electronic communication protocols is a:
  - Requirement of the SAFE Port Act of 2006
  - Mandate of the Office of Management and Budget (OMB)
  - Recommendation of the Import Safety Working Group (ISWG)
  - Recommendation in both the 2007 and 2008 Report to Congress on the International Trade Data System (ITDS) .
- The WCO messages have been agreed to by the WCO Members, including the US. In both the WCO Framework Agreement and in G-7 communiqués, the United States has committed to implement the WCO messages.

# US CBP & the WCO DM

# US CBP & WCO DMPT

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- January 2014 – US reengagement in the DMPT
- Part of that reengagement included a US feasibility assessment of CBP's use of the WCO Data the following areas:
  1. **Scope:** Ocean import manifests (regular/"straight" BOLs only) using CAMIR and ANSI X.12 EDI message formats.
  2. **Type:** Developed proof-of-concept information packages and XML schemas for Ocean import manifest (base: Cargo Report Declaration) and Importer Security Filing (ISF) (base: AEI Declaration).

# US CBP & WCO DMPT (Cont'd)

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- August 2015 - March 2016
  - Attended DMPT meetings in September 2015 & January 2016 and presented the following:
    - ACE Overview in September
    - ACE Update in January
    - findings of an intersession XML Discussion Group in January.
  - Conducted analysis of CBP's current operational landscape for trade data exchange.
  - Began Trade Outreach via:
    - 9/2 - TSN TAG Conference Call
    - 3/8 - CESAC Meeting
  - 2/11 - Meeting with IATA re: CBP publication of Cargo-XML standard for ACI filing.



# January WCO DMPT Attendance

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## 27 Members

- Canada
- United States
- Mexico
- Brazil
- Turkey
- Oman
- Saudi Arabia
- Egypt
- Morocco
- Tunisia
- South Africa
- Senegal
- Ghana
- Nigeria
- New Zealand
- Malaysia
- Sri Lanka
- India
- China
- Japan
- Netherlands
- Sweden
- Germany
- Switzerland
- Luxemburg
- Poland
- Russia

## 5 International Organizations

- European Union
- GS-1
- UN UNCTAD ASYCUDA
- UN CEFACT
- International Maritime Organization

# U.S. CBP Trade Data Exchange

# US CBP Trade Data Exchange Landscape

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- When exchanging data with the trade community, CBP Cargo Systems use:
  - 19+ different types of Electronic Data Interchange (EDI) message formats
    - Includes both proprietary and industry standards
    - Nearly all use fixed-length, positional formats
    - Have been highly customized to meet CBP's cargo processing business requirements.
  - 140 incoming transaction types.
  - More than 180 outgoing transaction types.
- Resulting in a trade data exchange landscape that is complex and difficult to support and implement.



# US CBP EDI Message Formats

System	Transport Mode (Import, Export)	Trade Data Exchange Standard
ACE		
Import Manifest	Air	AIR CAMIR; To Be - IATA Cargo-XML
	Ocean	Ocean CAMIR, ANSI-X12 (v4010), ANSI-X12 (v5040 ISF), ANSI X12 (v5010 CSM), UN/EDIFACT (vSMDG 1.5, 2.0.7, & 2.1.1 BAPLIE), UN/EDIFACT (D:01C:CC WCOCAR) UN/EDIFACT (D:00B:UN CSM);CSV (CSM)
	Rail	ANSI X.12 (v4040); Railinc (H CLM)
	Truck	ANSI-X12 (v4060), UN/EDIFACT (v03B Standard), UN/EDIFACT (v00B Preferred, FAST/NCAP)
Export Manifest	Air	AIR CAMIR, IATA Cargo-IMP (32nd Edition); To Be - IATA Cargo-XML
	Ocean	ANSI-X12 (v6050)
	Rail	To Be - ANSI-X12 (v7010)
	Truck	TBD
	Commodity	AESTIR-C; AES-C X12
Entry / Entry Summary	Entry, Entry Summary, & Other Post Release Functions	ACE CATAIR, XML (DIS - Document Imaging System)
<b>ACS - Legacy System</b>		
Entry / Entry Summary	Entry, Entry Summary, & Other Post Release Functions	ACS CATAIR



# EDI Message Formats by Trade Participant

EDI Message Format	Version	Trade Participant	Quantity
Ocean CAMIR	N/A	Carrier	3,171
		Facility	184
		Additional Notify Party	18
Ocean X12	(4010)	Carrier	1,357
		Facility	10
		Additional Notify Party	22
	(5010)	Carrier	1,357
	(5040)	Carrier	10
	(v6050) export	Carrier	1,357
Ocean EDIFACT	(vSMDG 1.5, 2.0.7, & 2.1.1)	Carrier (MVOCCs)	2,979
	(D:00B:UN)	Carrier	2,979
	(D:01C:CC)	Additional Notify Party	0
Ocean CSV	N/A	Carrier	1
Air CAMIR	N/A	Carrier	270
		Forwarder	24
		Facility	524
Air IATA Cargo-IMP	N/A export	Carrier	1
Rail X12	(4040)	Carrier	21
	(v7010) export	Carrier	21
Rail Railinc	H	Carrier	21
Truck X12	(4060)	Carrier	1,340
Truck EDIFACT	(v03B Standard)	Carrier	596
	(v00B Preferred, FAST/NCAP)	Carrier	3
ACE CATAIR	N/A	Broker	4,786
		Surety	17
DIS XML	N/A	All	638
AESTIR-C	N/A	Forwarder	443
AES-C X12	N/A	Forwarder	120

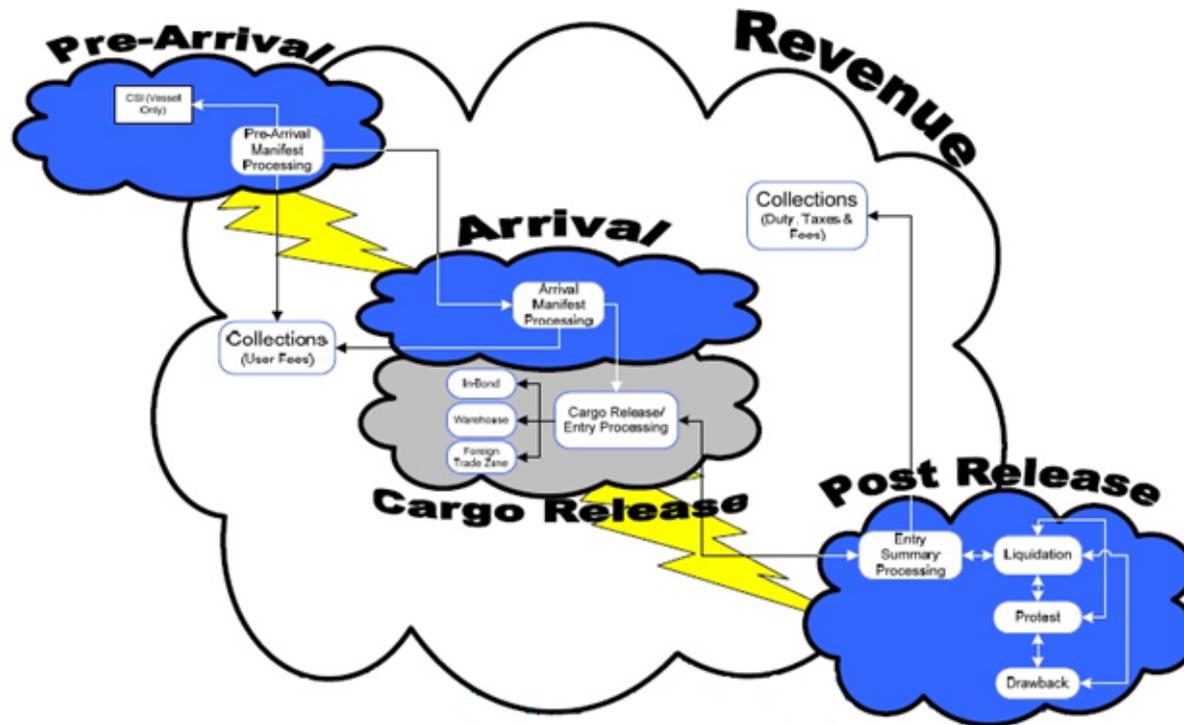
# Potential Usage in Automating Manual Forms

MANUAL FORMS		WCO DM IPs									
Form Number	Form Name	CRI	CRE	CON	TRT	IM	EX	RESP	AEI	LPCO	Carnet
1300	Vessel Entrance or Clearance Statement			X							
1303	Ship's Stores Declaration			X							
1304	Crew's Effects Declaration			X							
4455	Certificate of Registration										X
3171	Application-Permit-Special License Unlading-Lading-Overtime Services									X	

- Potential to automate:

- CBP Forms 1300, 1303, and 1304 using WCO Data Model Conveyance Information Package (IP), or IMO IP (under development) for EDI Messages.
- CBP Form 4455 for temporary cargo importations using WCO Data Model ATA Carnet IP.
- Monitoring world discussions on the automation of ATA Carnets.

# Global vs. U.S. Specific Business Processes



- Pre-Arrival and Arrival processing similar across all trading nations
- U.S. processes start to diverge from the rest of the world's in Cargo Release with the 2-step process and bonding

# Early Findings

# EDI Message Format Affinity with WCO Data Model Information Packages

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- High

- Air CAMIR (Import and Export)
- Ocean CAMIR and X12 (Import and Export)
- Ocean EDIFACT (Import)
- Rail X12 (Import)
- Truck X12 and EDIFACT (Import)
- ACE Export Commodity AESTIR and X12
- ATS-CSM X12, EDIFACT, CSV, and Railinc
- ACS CATAIR (Standalone ISF)

- Low

- ACE CATAIR

# Sample WCO DM IP Affinity - Ocean Imports

IMPORTS	Transaction Type	Transaction Name	WCO DM IPs									
			CRI	CRE	CON	TRT	IM	EX	RESP	AEI	LPCO	Carnet
OCEAN												
CAMIR	MI	Manifest	X								X	
CAMIR	MR	Manifest Response							X			
CAMIR	AI	Amendment	X									
CAMIR	AR	Amendment Response							X			
CAMIR	HI	Cargo Release			X							
CAMIR	HR	Cargo Release Response							X			
CAMIR	II	In-Bond				X						
CAMIR	IR	In-Bond Response							X			
CAMIR	TI	Permit to Transfer				X						
CAMIR	TR	Permit to Transfer Response							X			
CAMIR	SF	Importer Security Filing								X		
CAMIR	SN	Importer Security Filing Response							X			
CAMIR	RC	Status Notification			X				X			

# Sample WCO DM IP Affinity - ACE CATAIR

IMPORTS (cont.)			WCO DM IPs									
EDI Message Format	Transaction Type	Transaction Name	CRI	CRE	CON	TRT	IIM	EX	RESP	AEI	LPCO	Carnet
<b>ACE CATAIR</b>												
CATAIR	AE	Entry Summary					X				X	
CATAIR	AX	Entry Summary Response							X			
CATAIR	UC	Entry Summary Status										
CATAIR	JC	Entry Summary Query										
CATAIR	JD	Entry Summary Query Response										
CATAIR	AD	AD/CVD Query										
CATAIR	AC	AD/CVD Query Response										
CATAIR	CB	eBond										
CATAIR	CX	eBond Response										
CATAIR	BS	eBond Status Notification										
CATAIR	CJ	Census Warning Query										
CATAIR	CL	Census Warning Query Response										
CATAIR	CQ	Cargo/Manifest/Entry Status Query										
CATAIR	C1	C/M/E Status Query Response										
CATAIR	CW	Census Override										
CATAIR	CO	Census Override Response										
CATAIR	II (Not being used)	Subsequent In-bond										
CATAIR	IR (Not being used)	Subsequent In-bond Response										
CATAIR	KI	Importer / Bond Query										
CATAIR	KR	Importer / Bond Query Response										
CATAIR	MO	PMS Reroute Request										
CATAIR	MQ	PMS Reroute Response										
CATAIR	QA (Not being used)	Quota Query										
CATAIR	QB (Not being used)	Quota Query Response										
CATAIR	QP	In-Bond				X?						
CATAIR	QT	In-Bond Response							X			
CATAIR	NS	In-Bond Status Notification										
CATAIR	SE	Cargo Release (Simplified Entry)					X					
CATAIR	SX	Cargo Release Response							X			
CATAIR	SO	Cargo Release / SE Status Notification							X			
CATAIR	TI	Importer / Consignee Update										
CATAIR	TR	Importer/Consignee Updt Response										
CATAIR	WP	In-Bond Update				X?						
CATAIR	WT	In-bond Update Response							X			
CATAIR	BD	Broker Download	X									
CATAIR	MS	Periodic Monthly Statement (PMS)										

# Early Roadmap Recommendations

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- Map to WCO Data Model and Plan Transition
  - Near-Term
    - Ocean CAMIR and X12 (Import)
    - Air CAMIR (Import)
    - CBP Forms 1300, 1303, and 1304
  - Mid-Term
    - Ocean EDIFACT (Import)
    - Ocean CAMIR and X12 (Export)
    - Air CAMIR (Export)
    - CBP Form 4455 / ATA Carnet
  - Long-Term
    - Rail X12 (Import)
    - Truck X12 and EDIFACT (Import)
    - ACE Export Commodity AESTIR, X12, and XML.
- TBD; Further Analysis Required
  - ACE CATAIR and ACS CATAIR (ISF)
  - ATS-CSM X12, EDIFACT, CSV, and Railinc.



*DO NOT PANIC!*

No impact on current ACE implementation.

Recommendations are consideration post-ACE.

# Technology Solution Considerations

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## Both XML and JSON

- Simplicity, Openness, and Interoperability
- Self-Describing Data
- Human and Machine Readable

## XML

- Flexible
- Extensible
- Best for Sharing Documents and other Non-Traditional Data Types (Image, Video)
- Supported by the WCO DM

## JSON

- Easier to Read
- Faster to Process
- Best for Sharing Traditional Data (Text and Numbers Only)

# Early Trade Feedback on Transitioning to WCO Data Model

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- 9/2 TSN TAG Conference Call
  - Ocean and Air trade participants were very receptive to transitioning to the WCO Data Model and its XML-based message sets
  - Rail and Truck trade participants were not receptive.
- 3/8 CESAC Meeting
  - Concerned about the timing of any required changes.
  - Requested we look into how to incorporate the WCO DM XML with CBP's Unified XML.
- Additional Trade feedback solicited from TAG at the April TSN Plenary Session.

Next Steps

*Near-Term for anything automated in ACE  
Production today is at least 2 years away.*

- Potential for pilots, testing, etc. a little sooner.
- Non-automated processes might come into play in the next year.

# Key 2016 Dates

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- 4/5 – 4/7: TSN Plenary Session; meeting with TAG to be scheduled to get Trade feedback on using WCO-based XML messages.
- 5/9 – 5/13: WCO DMPT / IMSC Meeting, Brussels, Belgium
- 5/30 - 6/3: WCO IT Conference & Workshop, Dakar, Senegal
- 8/17: Adoption Roadmap for CBP Import/Export Data Sharing Using International Standards.
- September 2016: WCO DMPT Meeting, Brussels, Belgium

# Next Steps

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- Continue to participate in WCO DMPT meetings.
- Continue Trade outreach
- Further analysis of CBP's current operational landscape for trade data exchange.
- Develop a high-level roadmap for integrating WCO Data Model into ACE.
- Continue to harmonize and standardize U.S. data requirements with WCO Data Model, and submit DMRs to modify WCO Data Model to meet U.S. needs.



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Committee Breakout Sessions  
USDA Cafeteria, Rooms 1 & 2

Wi-Fi: HQ – Guest  
Username: jefferson  
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April 5-7, 2016  
Washington, D.C.

# Export Task Group Meeting

Export, MMM, ITDS, and Committees

April 7, 2016

8:30 – 10:00 AM

Wi-Fi: HQ – Guest  
Username: Jefferson  
Password: UDSAguest

# Break

10:00 – 10:15 AM

# Transition Committee

10:15 – 12:00 PM