

U.S. Customs and Border Protection

2017 - WCO Knowledge Academy

U.S. Single Window



21 June 2017, Brussels - Belgium



U.S. Customs and
Border Protection

Agenda

- ❑ U.S. Single Window (ACE)
- ❑ ACE Trade Data Exchange Landscape
- ❑ ACE / WCO Data Model Alignment

U.S. Single Window for Trade



INTERNATIONAL TRADE

- In FY2016, CBP processed more than \$2.3 trillion in imports and more than \$1.5 trillion in exports, and collected approximately \$36 billion in duties, taxes and fees

ACE / ITDS

- Executive Order established deadline of December 2016 for implementation
- ACE is the technology enabler through which Single Window processing is realized

PARTNER GOVERNMENT AGENCIES

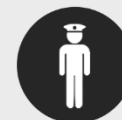
- More than 47 Partner Government Agencies
- Streamlines paper submissions and multiple entry systems
- Automates 269 forms required for imports and exports



Quicker data availability for Government - better identification of dangerous or prohibited shipments



Automated Agency interactions reduce paper, enable near-real time decision making by Government



Easier for industry to comply with government regulations



Reduced costs for Government and industry

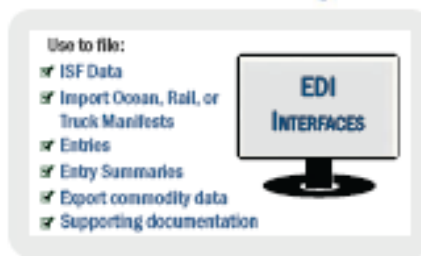
How the Single Window Operates

How it Works

ACE offers the trade community a simplified process for submitting data and interacting with CBP and Partner Government Agencies (PGAs). The graphic below provides a snapshot of how file and access data in ACE.

Transmit

1 Trade community files data directly to ACE



2 ACE processes and stores data received



3 ACE sends responses to trade as needed

View

Use reports to query data in the ACE Portal

ACE interacts with PGA systems to allow interagency processing
































ACE: EDI v Portal

Filing data with ACE:

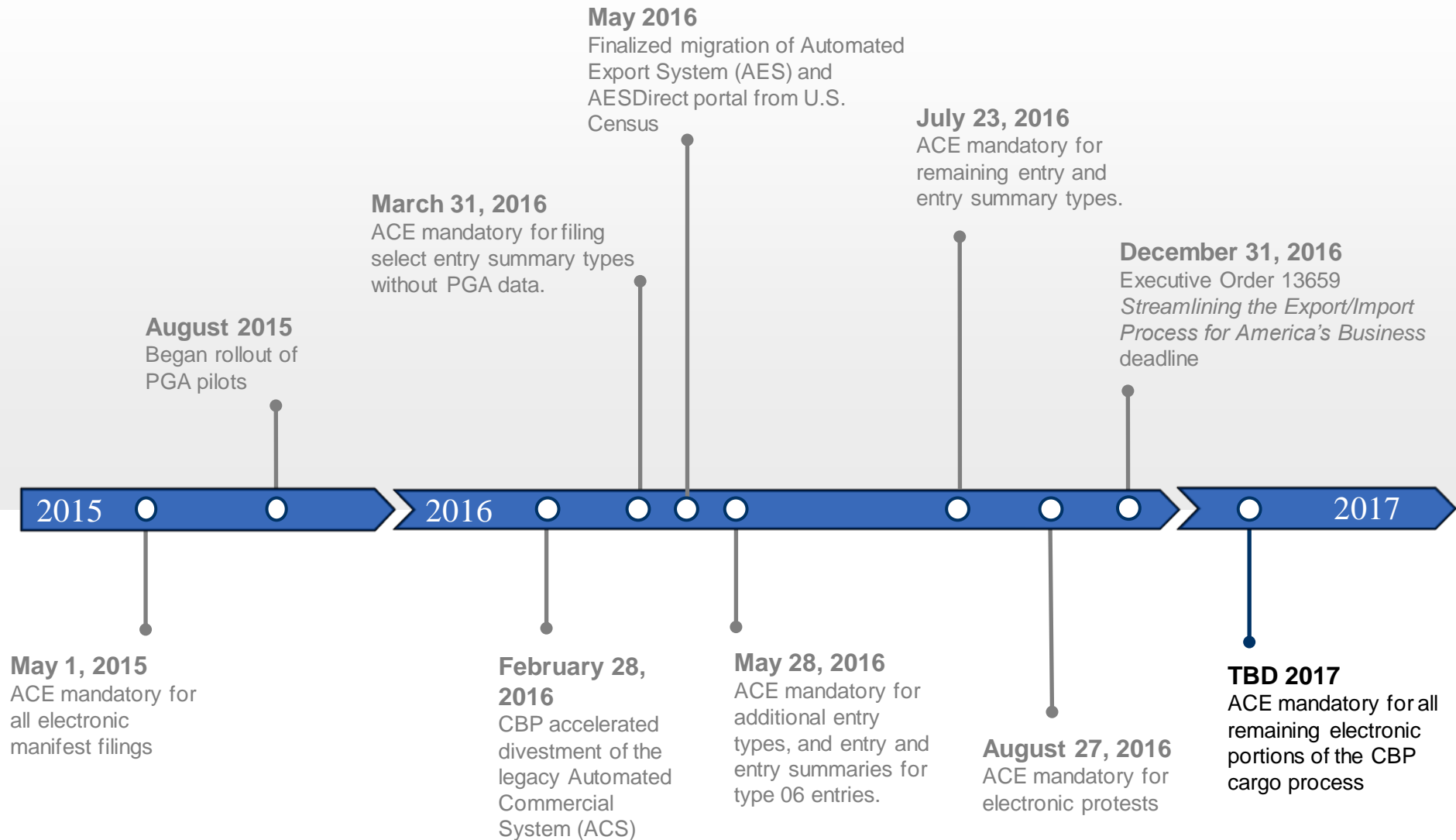
- Submit import and export data in accordance with ACE technical standards through Electronic Data Interchange (EDI)

Once data is submitted to CBP, use the ACE Portal to:

- Evaluate compliance and monitor daily operations
- Access to more than 400 reports
- Submit truck import manifests
- Monitor data on file with CBP

<i>"I want to..."</i>	ACE via EDI Interfaces	ACE Portal
 Send Importer Security Filing Data <small>*Only low volume through Portal (less than 12 per year)</small>		
 File an Import Air, Ocean, or Rail Manifest		
 File an Import Truck Manifest		
 File an Electronic Inbond		 <small>Via Truck Manifest</small>
 File an Entry		
 File an Entry Summary		
 File Export Commodity Data <small>*Can also be filed using AESDirect</small>		
 Run Reports		
 Respond to CBP Forms 28, 29, 4647		
 Create Blanket Declarations		
 Submit Supporting Documentation	 <small>DIS</small>	 <small>Upload Forms</small>
 Manage Account and Periodic Monthly Statement Information		
 Make Post Summary Corrections		
 File Export Air Manifest	<i>Coming Soon!</i>	

Single Window Implementation via ACE



Benefits of the Single Window

Objectives for Single Window

Data Availability



Quicker data availability for Government - better identification of dangerous or prohibited shipments

Paper Reduction



Automated Agency interactions reduce paper, enable near-real time decision making by Government

Compliance



Easier for industry to comply with government regulations

Cost Reduction



Reduced costs for Government and industry

Results of Single Window

Data Availability

- 33% reduction in wait times at land border truck processing ports
- 68x faster processing of single and continuous bonds
- Data transmission among multiple systems for targeting and selectivity

Paper Reduction

- 241 import forms automated
- 58 export forms automated

Compliance

- System verification of data prior to CBP acceptance
- Ability for industry to easily monitor progress of their filings

Cost Reductions

- CBP's investments in automation and capability acquisition led to an estimated 1.42% reduction in cost to import goods into the United States in FY16

Achieving Single Window

- Completed six of seven primary deployments to achieve core trade processing in ACE. Last deployment will allow the transition off the legacy Automated Commercial System (ACS).
- Coordinated with 47 partner government agencies to facilitate interagency trade data sharing and communications
- Reached nearly 90,000 CBP, PGA and Trade active ACE users
- Trained 7,500 CBP field users across multiple capabilities
- Published over 100 Federal Register Notices (FRNs) to support policy and legal requirements



Best Practices: Single Window Implementation



Political
Will

Process



Legal
Framework



Engagement



Agility



Sharing



Evaluate



Partner Government Agencies



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agencies data
requirements
satisfied by CBP data

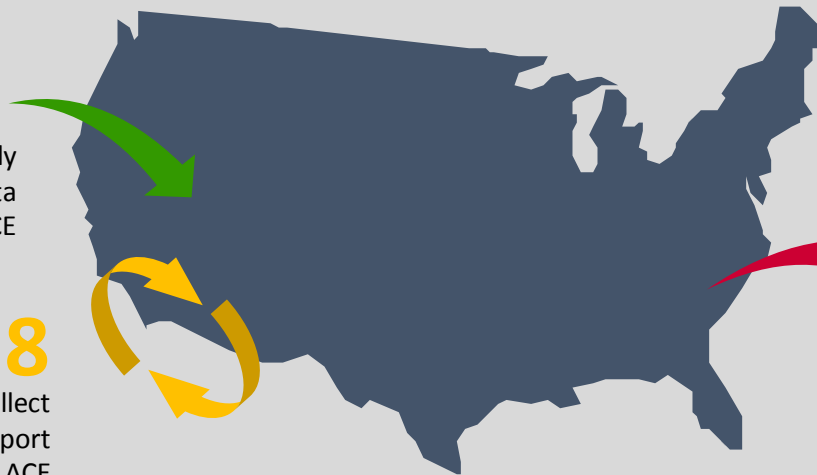


14

agencies only
collect import data
in ACE

8

agencies collect
import and export
data in ACE



2

agencies only
collect export data
in ACE



269 paper forms automated

submitted by:

PGA Message Set

Consolidated data elements collected electronically
by CBP on behalf of government agencies.

Document Image System

Electronically supplied image files to CBP
and PGAs.



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Details on forms available at www.cbp.gov/ace-pga



Key Single Window Benefits for PGAs

- Federal agencies have earlier, automated visibility to shipment data,
 - Expedites their import or export assessments at the border and speeds the flow of legitimate trade
 - Improves security, health and safety of cargo
- Facilitates interaction PGAs
 - Integrated chat/messaging feature allows CBP to interface with PGA personnel
- Eliminates need to submit PGA forms through paper
 - PGA Message Set allows for digital submission of PGA data in lieu of paper forms.
 - Document Imaging System allows electronic submission of imaged copies of PGA and CBP forms electronically as opposed to paper.



ACE Post Core Priorities

- Following the July 8, 2017 deployment of post release capabilities and any final transitions required to decommission the legacy ACS, ACE will transition to the Operations and Maintenance (O&M) phase of its life cycle.
- The O&M phase means core ACE development is complete, there are no ACE Program funds for new development.
- Resources for the remaining life cycle of the core ACE system are dedicated to promoting supply chain predictability by ensuring ACE system availability and reliability through:
 - Timely system bug-fixes;
 - Program management;
 - Software sustainment; and
 - Infrastructure support for deployed core capabilities.

ACE Trade Data Exchange Landscape



ACE Trade Data Exchange Landscape

- ACE supports processing of:
 - 20 + Electronic Data Interchange (EDI) message formats.
 - 15,000+ Trade participants set up for EDI.
 - 140+ unique types of incoming EDI messages.
 - 180+ unique types of outgoing EDI messages.
- Average EDI processing volumes:
 - Daily: Over 1.6 million in & 6.1 million out.
 - Yearly: Over 600 million in & 2.2 billion out.



US CBP EDI Message Formats


System	Subsystem	Transport Mode / Goods Declaration	Trade Data Exchange Standard
ACE	Import Manifest	Air	Air CAMIR
		Ocean	Ocean CAMIR, ANSI-X12 (v4010), ANSI-X12 (v5040 ISF), UN/EDIFACT BAPLIE (vSMDG 1.5, 2.0.7, & 2.1.1), UN/EDIFACT WCOCAR (CSI BOL Download Only), Container Status Messages: ANSI X.12 322 (v4010/5010), ANSI X.12 315 (v4010/5010), UN/EDIFACT CODECO, & UN/EDIFACT COARRI
		Rail	ANSI X.12 (v4040)
		Truck	ANSI-X12 (v4060), UN/EDIFACT (v03B Standard), UN/EDIFACT (v00B Preferred, FAST/NCAP)
	In-Bond, Cargo Release, & Entry Summary	In-Bond, Cargo Release, Entry Summary, & Other Post Release Functions	ACE CATAIR
	Document Management System (DIS)	All	XML (DIS - Document Imaging System)
	Export Manifest	Air	AIR CAMIR, IATA Cargo-IMP (32nd Edition)
		Ocean	ANSI-X12 (v6050), CAMIR
		Rail	To Be - ANSI-X12 (v7010)
		Truck	TBD
		Commodity	AESTIR
ACS (Legacy)	Remaining Post Release Processes	Other Post Release Functions	ACS CATAIR



EDI Message Formats by Trade Participant


EDI Message Format	Version	Trade Participant	Quantity (Est.)
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
Ocean EDIFACT	(v6050) export	Carrier	1,357
	(vSMDG 1.5, 2.0.7, & 2.1.1)	Carrier (MVOCCs)	2,979
	(D:00B:UN)	Carrier	2,979
Ocean CSV	N/A	Additional Notify Party	0
		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
	N/A	Surety	17
DIS XML	N/A	All	638
AESTIR-C	N/A	Forwarder	443
AES-C X12	N/A	Forwarder	120

EDI Implementation Guides Available to Trade









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HOME >> TRADE >> ACE AND AUTOMATED SYSTEMS >> TECHNICAL DOCUMENTATION FOR ALL CBP AUTOMATED SYSTEMS

Trade

- Basic Import and Export
- ACE and Automated Systems
 - Getting Started with Automated Systems
- Technical Documentation**
 - Automated Commercial System/Broker Interface
 - Automated Export System
- ACE Features
- ACE Federal Register Notices
- Border Interagency Executive Council
- Programs and Administration

Technical Documentation for All CBP Automated Systems

These pages linked below provide the message formats and technical specifications necessary to electronically transmit data to CBP's automated systems, along with scheduled system outages that affect testing of software.

ACE Technical Documentation

Import Manifest	<ul style="list-style-type: none">AirOceanTruckRail
Entry / Entry Summary	<ul style="list-style-type: none">ACE Customs and Trade Automated Interface Requirements (CATAIR)
Exports	<ul style="list-style-type: none">AESDirect Technical InformationCommodity Filing (Automated Export System (AES) capabilities are now part of the ACE system)Manifest Filing


Legacy System Documentation

ACE Approved Software Vendors and Service Providers


A complete list of approved companies who have developed software applications or provide filing services for ACE are provided below. Inclusions on this list do not constitute any form of endorsement by CBP.

ACE Software Vendors

- [Truck Software Developers](#)
- [Air Manifest Vendors & Software Developers](#)
- [Ocean Data Processing Services](#)
- [Export Vendors and Service Centers](#)



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ACE / WCO Data Model (DM) Alignment



Benefits of WCO DM Alignment

- Potential for one EDI format reducing cost.
- Improves data quality by the use of common vocabulary, definitions, representations, and standard international codes.
- Facilitates compatibility promoting information sharing.
- Reduces burden on the trade community.
- Ensures ongoing compliance with international data standards.



Alignment Efforts

- January, 2015 - Technical SME re-engagement with WCO Data Model Project Team (DMPT).
- Completed feasibility assessment & proof-of-concept
 - Limited scope focusing on specific messages.
- Drafted adoption roadmap for alignment strategy.
- Conducted Trade outreach.
- Coordinated efforts with other customs authorities utilizing the WCO DM.



Recent Activities

- Determined best path forward for alignment effort.
- Fully engaged in mapping of US Ocean Import Manifest messages to the WCO Data Model.
 - X12 messages mapped to date: (309-Manifest, 353-Event Advisory, 357-In-bond, 356-Permit to Transfer)
- 5/15 - 5/19: Attended the WCO Data Model Project Team (DMPT).
 - US CBP, Louritha Green chaired the meeting.
 - US CBP presented two Data Maintenance Requests (DMRs)
 - Added Principal & Agent data elements to the Consignment level in DM.
 - Both DMRs were approved.



Next Steps

- Continue to participate in WCO DMPT meetings.
- Complete mapping of Ocean Import Manifest.
- Begin mapping of Truck Import Manifest in support of North American Single Window (NA SW) activities.
- Vet DMRs and submit to WCO DMPT as needed.
 - Potential to submit a DMR as NA SW.
 - Continue to coordinate with other customs administrations.
- Determine strategy for US WCO Information Packages.



Next WCO DMPT Meeting

- 9/18 - 9/22: WCO DMPT Meeting, Brussels, Belgium.



QUESTIONS?

