

# *Single Window and the Automated Commercial Environment (ACE)*

*Software Developers Session  
October 9, 2014*



*Elizabeth McQueen  
International Trade Data System (ABO)*



U.S. Customs and  
Border Protection

# AUTOMATED COMMERCIAL ENVIRONMENT/INTERNATIONAL TRADE DATA SYSTEM U.S. SINGLE WINDOW FOR TRADE



## INTERNATIONAL TRADE

- In FY2013, U.S. trade accounted for \$2.4 trillion in imported goods and \$1.6 trillion in exported goods

## ACE / ITDS

- Executive Order establishes deadline of December 2016 for implementation
- ACE is the technology enabler through which Single Window processing will be achieved
- Key features to enable Single Window processing have been implemented

## PARTNER GOVERNMENT AGENCIES

- 47 Partner Government Agencies
- Largely paper-based with multiple entry systems
- Nearly 200 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

# Single Window Authorization and Support

- Executive Order signed February 19, 2014 – ***Streamlining the Export / Import Process for America’s Businesses***
  - Directs 47 U.S. Federal agencies with a role in trade to be ready to participate in the electronic “Single Window” by December 2016
  - Expands scope of the **Border Interagency Executive Council (BIEC)** to all agencies with a border interest
- **ITDS Board of Directors** provides executive leadership and direction, and works with PGAs on automation
- **ACE Executive Steering Committee** (DHS and CBP executives) provides oversight and guidance to the ACE Program to ensure successful development and operation



# U. S. Single Window Partner Government Agencies (PGAs)

## DEPARTMENT OF AGRICULTURE

AMS | Agricultural Marketing Service  
APHIS | Animal and Plant Health Inspection Service  
FAS | Foreign Agricultural Service  
FSIS | Food Safety and Inspection Service  
GIPSA | Grain Inspection, Packers & Stockyards Administration

## DEPARTMENT OF COMMERCE

BIS | Bureau of Industry and Security  
U.S. Census Bureau  
FTZB | Foreign Trade Zones Board  
E&C | Enforcement and Compliance  
OTEXA | Office of Textiles and Apparel  
NMFS | National Marine Fisheries Service

## DEPARTMENT OF DEFENSE

USACE | Army Corps of Engineers  
DCMA | Defense Contracts Management Agency

## DEPARTMENT OF ENERGY

OFE | Office of Fossil Energy  
EIA | Energy Information Administration  
OGC | Office of General Counsel

## DEPARTMENT OF JUSTICE

ATF | Bureau of Alcohol, Tobacco, Firearms and Explosives  
DEA | Drug Enforcement Administration

## DEPARTMENT OF LABOR

BLS | Bureau of Labor Statistics

## DEPARTMENT OF HOMELAND SECURITY

USCG | United States Coast Guard  
CBP | Customs and Border Protection  
TSA | Transportation Security Administration

## DEPARTMENT OF THE INTERIOR

FWS | Fish and Wildlife Service

## DEPARTMENT OF TRANSPORTATION

BTS | Bureau of Transportation Statistics  
FAA | Federal Aviation Administration  
FHA | Federal Highway Administration  
FMCSA | Federal Motor Carrier Safety Administration  
MARAD | Maritime Administration  
NHTSA | National Highway Traffic Safety Administration  
PHMSA | Pipeline Hazardous Materials Safety Administration

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

CDC | Centers for Disease Control and Prevention  
FDA | Food and Drug Administration

## DEPARTMENT OF TREASURY

IRS | Internal Revenue Service  
OFAC | Office of Foreign Assets Control  
TTB | Alcohol and Tobacco Tax and Trade Bureau  
FinCEN | Financial Crimes Enforcement Network

## DEPARTMENT OF STATE

A/LM | Bureau of Administration, Office of Logistics Management  
DDTC | Directorate of Defense Trade Controls  
OES/OCM | Bureau of Ocean and International Scientific Affairs  
OFM | Office of Foreign Missions

## INDEPENDENT AGENCIES

CPSC | Consumer Product Safety Commission  
EPA | Environmental Protection Agency  
FCC | Federal Communications Commission  
FMC | Federal Maritime Commission  
ITC | International Trade Commission  
NRC | Nuclear Regulatory Commission  
USAID | U.S. Agency for International Development  
USTR | Office of the United States Trade Representative



U.S. Customs and  
Border Protection



# Implementing the Single Window

## Three enablers provide the means for Partner Government Agencies (PGAs) to participate in ACE

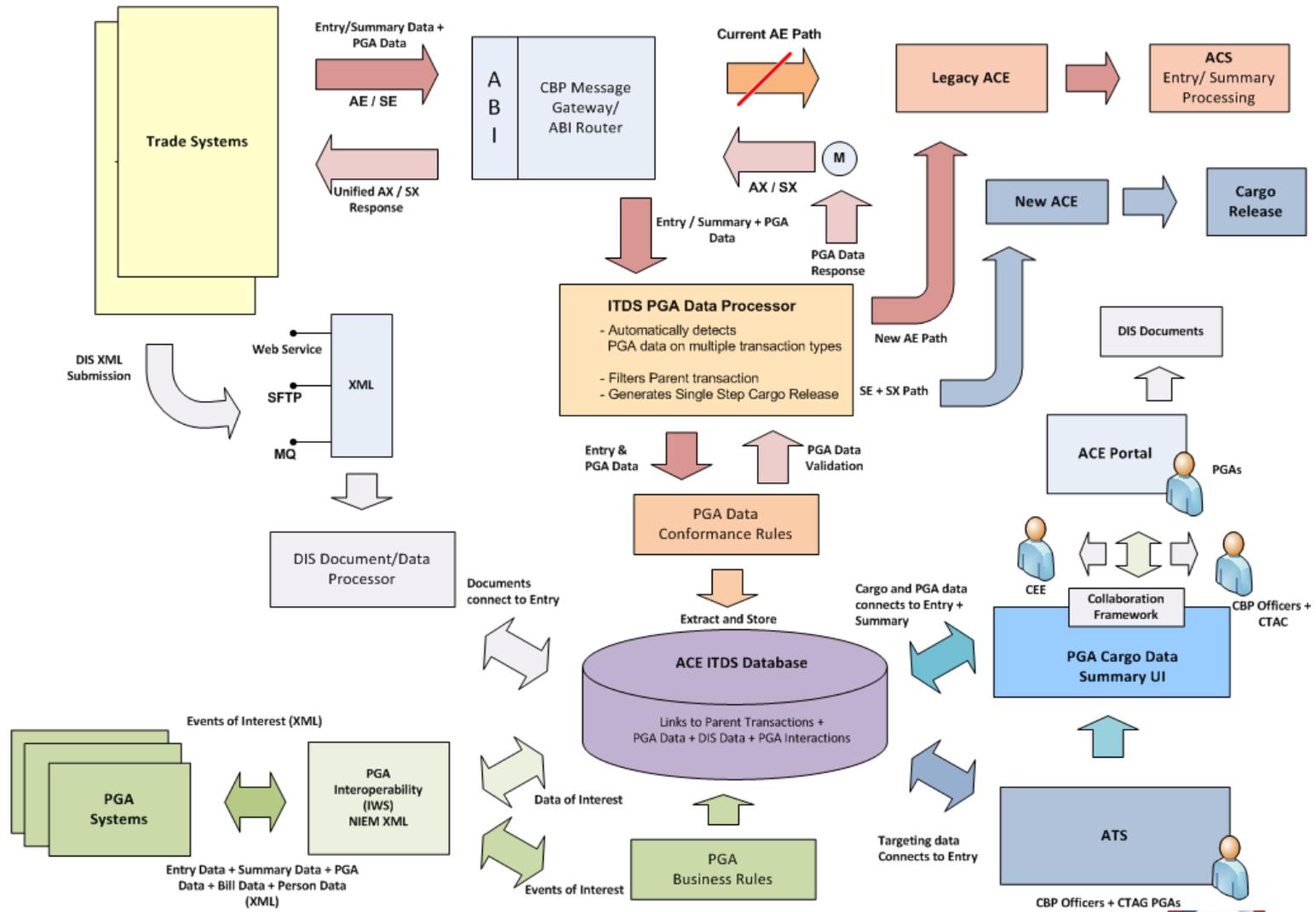
- **Partner Government Agency (PGA) Message Set** - Establishes a single, harmonized set of information to be collected electronically from international traders by CBP on behalf of PGAs
- **Interoperability Web Services** - Provides a system-to-system pipeline for data transfer between CBP and PGAs
- **Document Image System (DIS)** - Allows trade members to supply images of needed documents electronically during the cargo import and export processes

The ACE portal provides PGAs with a graphical user interface (GUI) to view the data in ACE, search on that data and run reports. The ACE portal is a consistent interface across PGAs that differs only by their particular information and processing needs.



# PGA Data Processing: Architecture

CBP ITDS Single Window - Architectural Landscape



U.S. Customs and Border Protection



# Extending the CATAIR for PGA Message Set

## Entry Summary Header and Line Item Data

Initially, PGA data can be received as part of a Simplified Entry (SE) or an ACE Entry Summary Certified for Release. The image below outlines the data on a

Form Approved OMB No. 1651-0022  
EXP. 03-31-2012

DEPARTMENT OF HOMELAND SECURITY  
U.S. Customs and Border Protection

### ENTRY SUMMARY

8. Importing Carrier USS Importing Ship		9. Mode of Transport 10		10. Country of Origin Japan		11. Import Date 07/04/2011	
12. B/L or AWB No. AAAA/123456789		13. Manufacturer ID JPABCDEF123TOY		14. Exporting Country Japan		15. Export Date 07/16/2011	
16. I.T. No.		17. I.T. Date		18. Missing Docs		19. Foreign Port of Lading 58810	
20. U.S. Port of Unlading 5301		21. Location of Goods/G.O. No. City Dock 14/M123		22. Consignee No. 98-9876543		23. Importer No. 12-1234567	
24. Reference No.		25. Ultimate Consignee Name and Address Big Box Store 123 Main St  City Houston State TX Zip 77001		26. Importer of Record Name and Address BB Importing Inc 987 South  City Houston State TX Zip 77009			

27. Line No.	28. Description of Merchandise			32. A. Entered Value B. CHGS C. Relationship	33. A. HTSUS Rate B. ADA/CVD Rate C. IRC Rate D. Visa No.		34. Duty and I.R. Tax	
	29. A. HTSUS No. B. ADA/CVD No.	30. A. Grossweight B. Manifest Qty.	31. Net Quantity in HTSUS Units		Dollars	Cents		
001	8517.11.0000	25000 lbs 25 CT	2500	25000 250 N	FREE	0.00		
	TLPHONE SET W/CRDLSHNDST							

# Entry Summary Header and Line Item Data

Initially, PGA data can be received as part of a Simplified Entry (SE) or an ACE Entry Summary Certified for Release. The image below outlines the data on a paper ACE Entry Summary that will become 'header' and 'line item' data in the electronic (ACE) world. (There is no paper equivalent with a Simplified Entry.)

Red outline = header data  
Blue outline = line item data

Form Approved OMB No. 1651-0022  
EXP. 03-31-2012

DEPARTMENT OF HOMELAND SECURITY  
U.S. Customs and Border Protection

## ENTRY SUMMARY

8. Importing Carrier USS Importing Ship		9. Mode of Transport 10		10. Country of Origin Japan		11. Import Date 07/04/2011	
12. B/L or AWB No. AAAA/123456789		13. Manufacturer ID JPABCDEF123TOY		14. Exporting Country Japan		15. Export Date 07/16/2011	
16. I.T. No.		17. I.T. Date		18. Missing Docs		19. Foreign Port of Lading 58810	
20. U.S. Port of Unlading 5301		21. Location of Goods/G.O. No. City Dock 14/M123		22. Consignee No. 98-9876543		23. Importer No. 12-1234567	
24. Reference No.		25. Ultimate Consignee Name and Address Big Box Store 123 Main St  City Houston State TX Zip 77001		26. Importer of Record Name and Address BB Importing Inc 987 South  City Houston State TX Zip 77009			

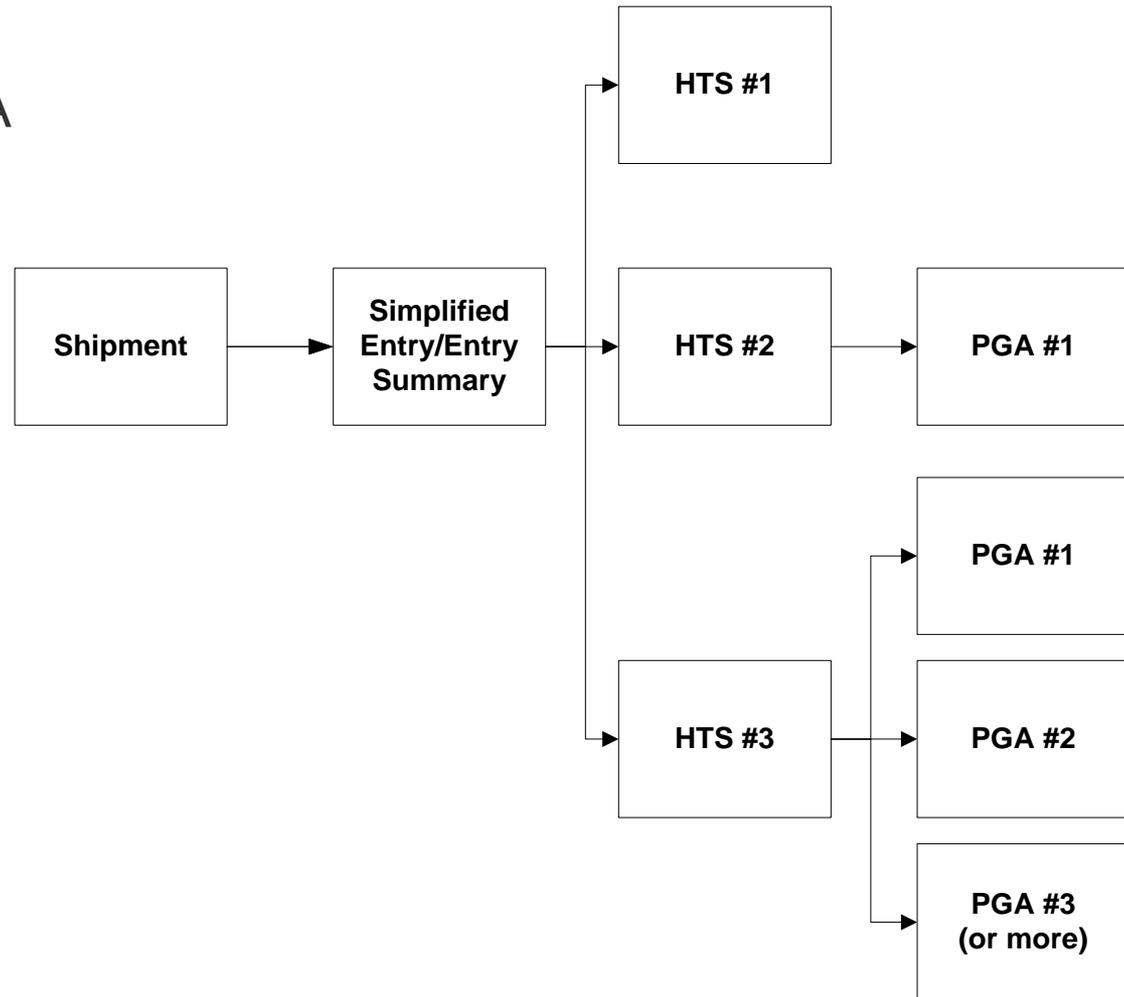
27. Line No.	28. Description of Merchandise			32. A. Entered Value B. CHGS C. Relationship	33. A. HTSUS Rate B. ADA/CVD Rate C. IRC Rate D. Visa No.		34. Duty and I.R. Tax	
	29. A. HTSUS No. B. ADA/CVD No.	30. A. Grossweight B. Manifest Qty.	31. Net Quantity in HTSUS Units		Dollars	Cents		
001	8517.11.0000	25000 lbs 25 CT	2500	25000 250 N	FREE	0.00		
	TLPHONE SET W/CRDLSHNDST							



# PGA Message Set Data Relationship Model

For each HTS, the relationship to PGA data can be:

- one-to-none,
- one-to-one, or
- one-to-many



# PGA Message Set Data Rules

- A PG01 must be submitted.
- The PG01 must include the government agency code of the applicable PGA.
- The PG02 generally gives the message set the flexibility to capture data related to a product or component.
- When using a PG02, a 'P' or 'C' item type must be reported.
- If ONLY reporting data at the product ('P') level (and not reporting any component level data), a PG02 with an item type 'P' (product) is required.
- There can only be one PG02 'P' associated with a PGA line number. However, there can be multiple components associated with that product indicator.



# PGA Message Set Data Rules, cont.

- The records should generally be provided in order, and repeated in sequence, as necessary and as prescribed by the parent-child relationship.

Correct	Incorrect
PG01	PG01
PG02	PG02
<b>PG19</b>	PG29
<b>PG20</b>	PG26
<b>PG21</b>	<b>PG19</b>
<b>PG19</b>	<b>PG19</b>
<b>PG20</b>	<b>PG20</b>
<b>PG21</b>	<b>PG20</b>
PG26	<b>PG21</b>
PG29	<b>PG21</b>

If the trade submits data as shown on the right, the system will know that each 19-20-21 is a distinct set of data that goes together and should be stored in ACE as 19-20-21 (one set), 19-20-21 (second set).

In the sequence shown on the right, the system would not know which 19, 20 and 21 are related to each other.



# PGA Message Set Data Rules, cont.

- In some instances, a lower record number may appear AFTER a higher one, depending on the data required by the first record. For example, in the PG30:
  - If *Inspection/Laboratory Testing Status* code indicates a request for an inspection, a PG21 may be required. Or,
  - If *Inspection/Laboratory Testing Status* code indicates a lab test was previously performed, a PG19, PG20 and PG21 must be completed..

The Record Order Could Look Like This:	Or This:
PG01 PG02	PG01 PG02 PG29 PG26



# PGA Message Set Data Rules, cont.

- The PG20 is only used with a PG19 and may be repeated if a PG19 is repeated.
- The PG08 is only used with a PG07.
- The PG23 is typically only used by FDA, but could be used by another PGA using an Affirmation of Compliance.
- If requesting an inspection in PG30, a PG21 may be required.
- If indicating in PG30 that an inspection was previously performed, the PG19, 20, and 21 may be required.
- If requesting an inspection in PG30 because of PGA regulatory purposes/authority, use the “I” code. A PG19, 20, and 21 may be required.
- When reporting processing that is not done in ‘lots’ (e.g., for fish harvesting or furniture), use the PG06. Use the PG25 to report processing performed in lots.



# PGA Message Set Data Rules, cont.

- PGA Message Set records are utilized *as necessary*:

<b>Every record of the message set does not have to be transmitted.</b>	<b><u>Only</u> those records that a PGA has indicated are necessary in a particular instance should be transmitted.</b>
Within a given record, every data element may not apply.	<u>Only</u> those data elements that a PGA has indicated are necessary in a particular instance should be transmitted.
<b>Many data elements are marked as conditional since not all PGAs require all data elements or records.</b>	<b><u>PGA guidance</u> will determine which elements are mandatory to fulfill specific PGA reporting requirements.</b>



# Data Reporting

- For a single commodity (HTS code), the PGA line numbering should start at 001 and continue incrementally until a different agency's data is reported (if needed).
- If under a single HTS code there are multiple PGAs, the numbering would restart at 001 with the new agency and continue incrementally as previously noted.

- Example:
- HTS code #
- OI (description)
- PG01 001 EPA 230.000.000
- PG02 (xxx some data)
- PG01 002 EPA 230.000.001
- PG02 (xxx some data)
- PG04 (yyy some data)
- PG30 (zzz some data)
- PG01 003 EPA 230.000.002
- PG02 (yyy some data)
- PG01 001 FSIS
- PG02 (xxx some data)
- PG01 001 FDA
- PG02 (xxx some data)
- PG10 (yyy some data)
- PG26 (zzz some data)

Refer to the introduction of the PGA Message Set chapter for more information on PGA line numbering



# Record Layout Guidelines

The following CBP CATAIR descriptions apply to the PGA Message Set:

- Transmit ONLY uppercase alphabetic characters A through Z.
- The data element length/class descriptors are defined as:

Code	Description
A	The data element is alphabetic only (uppercase ONLY)
AN	The data element is alphanumeric only (uppercase ONLY, for characters A through Z).
N	The data element is numeric only.
X	The data element is alphanumeric or special characters (uppercase ONLY, for characters A through Z).



# Record Layout Guidelines, cont.

- These data elements are in fixed length format. If all positions are not filled, the formatting rules are:

Code	Description
A	Left justify and space fill
AN	Left justify and space fill
N	Right justify and zero fill
X	Left justify and space fill

**Note:** If there is no data to insert in a field, space fill.

- Status codes are important to ensure that appropriate data is transmitted. Codes must be used where indicated or errors will occur.

Code	Description
M	Mandatory data element – must always be present
O	Optional data element – generate data if available
C	Conditional data element – data is provided if conditions warrant



# Mandatory Dates for Transition to ACE

Date	Mandatory Requirement	Time Remaining
<b>May 1, 2015</b>	Mandatory use of ACE for electronic import and export manifest	7 months
<b>November 1, 2015</b>	Mandatory use of ACE for electronic Cargo Release and related Entry Summary filings	13 months
<b>October 1, 2016</b>	Mandatory use of ACE for all remaining electronic portions of the CBP cargo process	24 months



# Questions?

- Contact CBP Help Desk for support and troubleshooting
  - 1-866-530-4172 or
  - [ACE.Support@cbp.dhs.gov](mailto:ACE.Support@cbp.dhs.gov)
- Visit the ACE FAQ page on CBP.gov  
<http://www.cbp.gov/trade/automated/ace-faq>
- Send general questions to [askACE@cbp.dhs.gov](mailto:askACE@cbp.dhs.gov)

