

AUTOMATED EXPORT SYSTEM

Reducing Respondent Burden Through The Electronic Integration of Business and Government Information Requirements

Charles A. Woods
Bureau of the Census

Sharon A. Mazur
U.S. Customs Service

1. Introduction

In 1995, the value of cargo exported by U.S. companies exceeded \$580 billion. As the demand for U.S. merchandise increases worldwide, so does the need to facilitate the movement of these exports while improving statistics concerning this trade. Today, the export documentation system is a highly manual process, burdensome to both the trade community as well as the U.S. Government agencies involved. Driven by inefficiencies inherent in this manual process, budget realities and good government policies as presented in the Administration's National Performance Review (NPR) and the National Export Strategy, the Bureau of the Census (Census) and the U.S. Customs Service (Customs) in cooperation with other federal agencies, have implemented an automated system for the centralized collection and processing of export information. This system will serve U.S. public and private interests and support the growth of U.S. exports thereby ensuring the health of the U.S. economy. Enhancing customer satisfaction and improving international trade statistics are the systems strategic policy goals. The NPR mandates that facilities and equipment be modernized, and that new and more efficient automated systems be developed to accommodate increasing demands for more and better information.

2. Compilation of Export Statistics - The Current Environment

Title 13 of the U.S. Code requires that Census collect, compile and publish accurate statistical information concerning United States exports and imports. The collection of export data has long been administered through the required filing of Shipper's Export Declarations (SEDs) for each export transaction having a value over a certain amount, now set at \$2500 for all shipments except for mail shipments which must be reported if they are above \$500. This results in the filing of over 6.5 million of the well-known buff colored SED forms, identified as 7525-V and 7525-V alternate annually. These forms require the exporter, or his agent to file information of a statistical nature concerning qualifying export shipments. For years these individual SEDs have constituted the basic source documents to meet the U.S. statistical requirements. The regulations are simply concerned with the timely and accurate collection and publication of statistical information, but do not prescribe the ways by which the information is to be collected to fulfill this responsibility.

Paper SEDs are collected in a cumbersome process. For vessel shipments, this process requires the exporter or his forwarder to prepare two copies of the SED which are transported to the exporting carrier in the port of exportation along with the merchandise. The exporting carrier collects the SEDs and includes both copies as part of the complete manifest. The completed manifest is then filed with Customs. Customs separates the SEDs from the completed manifest, attaches an internal form with identifying information to each stack of SEDs and mails the SEDs to the Census processing facility in Jeffersonville, Indiana. Census requires that SEDs be received from Customs by the 25th day of the following month. The Jeffersonville facility keys the statistical data from these SEDs and subsequently transmits the data to Census headquarters in Washington, D.C. In excess of 500,000 SEDs or 42 percent of the monthly trade transactions are processed in this manner.

In addition to the collection of paper SEDs, Census annually collects over 5.5 million records electronically through a data exchange with Canada and over 4 million records electronically through the Census Bureau's Automated Export Reporting Program (AERP).

The data exchange with Canada was implemented in 1990 to use the Canadian import statistical data records in lieu of collecting and compiling individual U.S. export records on these shipments. This process not only eliminated the burden on exporters of having to file export documentation for these shipments but also improved the quality and coverage of the data.

AERP is a Census Bureau program whereby authorized exporters, freight forwarders and carriers submit export information electronically on a monthly basis directly to Census. With over 300 companies authorized to participate in this program, the required annual filing of 3,000,000 paper SEDs has been eliminated. The AERP, however, only serves the statistical needs of the Census Bureau and does not meet the licensing and enforcement needs of Customs and other agencies.

3. Importance and Uses of Export Statistics

Current uses of the information are far-reaching, both by Government and by business. The most visible uses by the Government for statistics received through filings of SEDs include:

- * calculating the U.S. balance of trade figures, announced on a monthly basis by the Department of Commerce,
- * input to calculations of the performance of the U.S. economy in the Gross Domestic Product and the National Income and Product Accounts,
- * formulating economic policies, both domestic and foreign,
- * input to bilateral and multilateral trade negotiations,
- * implementing promotional programs for the expansion of exports, and
- * establishing controls on sensitive exports.

Uses of the data by the business sector (manufacturers, wholesalers, exporters, carriers, port authorities, etc.) are also extensive and include:

- * product research and market development,

- * analyses of market share,
- * market penetration studies,
- * evaluation of competition, including products, markets and pricing,
- * evaluating the need for new port facilities, and
- * determining trade and transportation routes.

4. Problems in the Current Environment

For a single export shipment, there can be as many as 40 government agencies involved and just as many paper documents required to conduct the commercial business transaction. Some of these include the purchase order, invoice, waybill, bill of lading, letter of credit, insurance certificate, and Shipper's Export Declaration (SED). Much of the information contained on these commercial forms may also be reported to the different government agencies. Reporting duplicate information on these and other government forms is common to the trade community.

The total cost of this paperwork, again for a single shipment, has been estimated at between \$150 and \$200, or even higher. For the SED alone, it has been estimated by the National Council on International Trade Documentation (NCITD) in a publication "Paperwork or Profits" that the cost of preparing and processing the form is \$18. The Exporter magazine, in another recent article on export documentation procedures and their costs, estimated the cost to be even as high as \$75 an SED form. The Census Bureau collects over 6.5 million SEDs annually. If the trade community is spending between \$18 and \$75 per SED form, then annually these companies are spending between \$117 and \$487.5 million dollars on the one form alone!

In the current collection environment, these SED forms are turned in to Customs by the carrier along with the required carrier manifest. It is the responsibility of the carriers to obtain a completed SED from either the exporter or the forwarding agent. This may take many phone calls or trips to the exporter or agent's office. These trips can be costly for the carrier. One ocean carrier did a study of their expenses associated with SEDs and found that they spend as much as \$777,000 per year to collect and process these forms.

In addition to the paperwork burden and associated costs, there are other problems that lead to coverage and quality deficiencies in the data. These deficiencies may be caused by unintended oversight by members of the trade community or by deliberate circumvention of the regulations such as attempts to undervalue exports. For example, under valuation has occurred when some foreign countries require the U.S. SED along with their own import documentation to establish the value at which import duties are charged. The array of reporting problems also includes, nonfiling and late filing of documentation and errors and omissions in the information that is filed.

5. Measures of the Problems

As related earlier, the exporter or his agent is faced with duplication of effort when reporting export information to the U.S. Government and with the costs associated with preparing and processing the forms. Time is also a dear commodity to the exporter and forwarder. A study conducted by the Census Bureau found that it takes, on average, 11 minutes to complete one SED, a figure that is used to calculate total burden hours to receive Office of Management and Budget clearance to use the forms. The latest clearance request indicates that over 1 million burden hours are estimated for the trade community to complete the Census Bureau SED forms annually.

Through comparisons of trade data with major trading partners and audits of trade documentation, the Census Bureau has identified and quantified missing information for export shipments. From these studies, the Census Bureau estimates that between three and seven percent of U.S. export trade is undocumented or not reported. In 1995, total export trade was \$584 billion. Using the 3 to 7 percent figures, undocumented or not reported exports may have totaled between \$17 and \$41 billion during 1995. This has an even greater impact on the quality of the detailed commodity level statistics and on the calculated trade deficit. Furthermore, exports of licensed and sensitive commodities not being reported may harm our national security.

Misleading statistics also result when export shipments are not tabulated in the correct transaction month. In the early 1980's, delays were occurring in the delivery and processing of large numbers of documents due to Customs operational procedures and the short processing schedule. Often late arrivals were too late for inclusion in the proper month's statistics. At its worst nearly 20 percent of each month's export shipments carried over into a subsequent month's statistics. Carry-over of this magnitude is not acceptable.

Ultimately, the Census Bureau delayed the merchandise trade release (from thirty to forty-five days after the end of the calendar month) to allow more time for Customs processing and Census receipt of the documents. Increased electronic reporting to the Census Bureau has also improved the timeliness of the data and decreased carry-over. By 1992, carry-over was reduced to less than 1 percent of total monthly export value and remains consistently at this low level.

Reporting errors and omissions are made frequently by exporters or their agents when reporting export shipments. Most errors involve missing or invalid commodity classification codes, missing or incorrect quantities or shipping weights and incorrect ultimate countries of destination. These errors have no effect on the total value of exports or the balance of trade statistics. However, they can affect detailed statistics significantly.

Recent studies indicate that 1 in 2 export documents contain one or more reporting errors. Many of these errors are easily resolved with no significant impact on published statistics. Routine processing procedures include methods for correcting these errors through clerical or automated means. However, clerical correction is time consuming and expensive. Defective records referred for clerical correction can cost many times as much to process as records that successfully pass the edits. Also, records referred for correction may not get into the correct statistical month. Automated corrections or imputations, which are less expensive, may introduce bias into the statistics. Therefore, the most accurate and cost effective means of resolving errors is to prevent them from occurring.

6. The Solution - The Automated Export System (AES)

The AES is the cornerstone of Customs outbound strategy to support and facilitate the movement of exports. Through partnerships with other federal agencies and the trade community, AES will provide one-stop filing for all government export data requirements and license validation while improving trade statistics, management of Harbor Maintenance Fees, and outbound compliance to and enforcement of export laws and regulations.

Specifically, the Automated Export System will:

- * provide a consistent, single source of uniform data businesses need to stay ahead in the global trade market,
- * remove the internal paper processing barriers to the flow of trade and generate efficiencies in information handling and storage that will translate into billions of dollars saved for businesses and governments,
- * eliminate duplicate data reporting requirements,
- * improve the targeting and analysis of exports to increase the interdiction of stolen vehicles, currency, chemicals used in chemical and biological warfare, and dual use technology with military and strategic applications without interfering with the flow of compliant cargo,
- * provide immediate availability of shipping data for exporters and freight forwarders once it is transmitted by the carrier,
- * provide an automated capability that will ultimately feed into an international trade database that unifies export and import processing, and
- * bring the process into alignment with the long-term global shift to electronic data interchange (EDI) and also with the North American Free Trade Agreement (NAFTA) and General Agreement on Tariffs and Trade (GATT) agreements making it easier to do business in multiple countries.

Accurate trade information, policy decisions based on sound export and balance of trade information, prohibiting illegal exports, and the effective enforcement of license requirements can be achieved while facilitating the flow of trade under AES.

Customs and Census have formed a partnership with other government agencies and the trade community to develop AES. Census has four full time people working at Customs headquarters to develop, program and implement AES. In addition to Customs and Census, the Department of Commerce's Bureau of Export Administration (BXA) and the State Department's Office of Defense Trade Controls are fully participating in the first phase of AES. Additional agencies will participate as they implement automation capabilities and have the resources to dedicate to the effort. The Maritime Administration, the Bureau of Alcohol, Tobacco and Firearms, and the

Energy Information Agency are taking initial steps to develop their interface with AES.

To ensure trade participation in the design and implementation of AES, more than 125 public or industry group meetings have been held to date and more are scheduled for 1996. A Trade Resource Group, a Customs Field Resource Group, and a Government Resource Group meet regularly to provide input to the design and implementation plans of AES. Trade involvement ensures AES meets industry's needs and to operate effectively within U.S. trade regulations that protect both the industry and the Nation.

7. The AES Process

The AES is being developed and implemented in a phased approach by mode of transportation. Phase I for the vessel environment went into production July 3, 1995 in five ports: Baltimore, Norfolk, Charleston, Houston, and Los Angeles/Long Beach. Development will soon get underway for rail, truck and air phases.

The AES is a simple process. The exporter or their agent transmits pre-departure commodity information to Customs before delivering the merchandise to the carrier. The AES will perform edits on essential pre-departure data elements. Transactions will be accepted after errors on this required data are corrected. For example, the AES edits are for a unique shipper's reference number, a valid country of destination, a valid commodity classification number, and value. The remaining pre-departure data and any subsequent data submitted may result in warning messages but will not hold up outbound shipments. The AES transmits an Internal Transaction Number (ITN) back to the exporter for their reference. The exporter or agent delivers the merchandise to the carrier.

When the merchandise is received, the carrier sends a "Receipt of Goods" message to Customs along with required transportation data. Customs will immediately respond to the carrier with an "OK to Load" message and the merchandise can be exported. A status notification is also sent to the exporter. The carrier has the option to turn off the receipt of these messages and the cargo can be exported as long as they do not receive a "Hold" (for examination) message.

The carrier then has up to four days after the shipment departs to electronically transmit the complete manifest data to Customs.

Billing for Harbor Maintenance Fees is initiated within AES. Statements listing all export activity are sent monthly and bills are sent quarterly.

8. From SED To AES - Manual to Electronic

The number of data elements required by AES from the trade community prior to export are approximately the same number of elements that are required on the SED at this time. The elements thus far reflect the data requirements of Customs, Census, State, and BXA in addition to the trade community. Although there are approximately 45 data elements proposed as

compared to 24 used today, most of these elements are not required to be reported for each shipment. AES will electronically complete much of the required identification information when the filers "account" number is provided, saving the exporter or carrier the time of keying and transmitting this information. Many of the other AES data elements are conditional, and are only required for certain types of shipments. In addition, continued work with new partnership agencies will ensure that their data requirements are also included in AES which will ultimately eliminate the need for filing their paper forms.

Another AES team at Customs is currently working to develop a post departure filing program titled Post-Departure Authorized Special Status or AES-PASS. This customer-focused program will allow authorized exporters post-departure filing privileges provided they meet and continue to comply with established participation criteria.

Six freight forwarders, one exporter and one carrier are currently filing data in production mode to AES. Three software vendors and one port authority have also been certified for production filing. Twelve companies are currently testing with Customs and eighty more companies have filed letters of intent to participate.

All current production filers are in a dual reporting mode at this time. The filers transmit data to AES and also must continue to file export documentation as previously required on an SED or through AERP. A team comprised of Customs, Census and trade community members are in the process of evaluating the AES system. The evaluation of the system and the certification of current participants is scheduled to be complete by the end of June 1996. At this time participants will only be required to file their export data using AES and can eliminate the paper SED - the ultimate goal!

After the evaluation is complete, AES will expand to all vessel ports. The filing of SED information will also be expanded to the air and land border modes of transportation as development work continues on the manifest portion of the system for air and land shipments. The current plan is to have AES available in all ports for all modes of transportation by 1999.

9. AES Will Reduce Respondent Burden

The U.S. Government imposes the rules, regulations and procedures upon businesses to capture information necessary to protect the health, welfare and safety of our citizens, and to safeguard sensitive materials and technology. Through the AES, Customs, Census and other Government agencies are trying to minimize the resources spent by both businesses and government in the export documentation process.

In summary, AES will reengineer the export information collection process, ease reporting burden through automation and accomplish this with expanded communication and cooperation with the export trade community. The goals of AES will be met through the integration of government needs with the realities of conducting international business.

Specifically, response burden will be reduced dramatically, effectiveness and efficiencies of operations will be improved and costs will be decreased by:

- * exporters or their agents will file information electronically and will not be required to file paper SEDs,
- * electronically reported data will, in most cases, be sourced from business transaction instruments such as waybills, invoices, shipper's letters of instructions, etc. that are already automated,
- * carriers will file information electronically and will not be required to file manifests on paper,
- * carriers will not be fined for late filing of commodity information for which exporters are responsible,
- * filers - exporters or their agents and carriers - will file information for which they are responsible and will maintain its quality,
- * filers will not be burdened to physically create and move paper through the system from exporter to freight forwarder to carrier to Customs to Census,
- * filers will no longer have to store mounds of paper documentation for 3 or 5 years for the SED and manifests respectively,
- * transcription errors caused by forwarders, carriers, Customs, or Census in the data capture process will be eliminated,
- * filers will not be required to report duplicate information with the various agencies involved in international trade,
- * the time spent by filers to resolve and correct suspect data will be greatly reduced through the immediate

- * participants will have access to a highly improved set of summary export information to make better decisions concerning markets, products, pricing, competition, etc., and
- * post departure filing privileges will permit improved use of resources by authorizing participants to file information after departure of the carrier in place of the demanding task of filing identification of errors as the data is originally reported,

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The ability to handle a 21st century workload, compete in a global marketplace while collecting the necessary information depends on our willingness to create, adapt to and master an electronic environment. Reengineering the export process will carry U.S. Government and business interests to unprecedented levels of cooperation and facilitation.