

**Survey Data Collection Over the Internet  
at the U.S. Bureau of Economic Analysis**

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Prepared for the work session on Statistical Data Editing organized by the  
Statistical Division of the UN Economic Commission for Europe,  
Madrid, Spain, October 20 - 22, 2003

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This paper draws upon a variety of Bureau of Economic Analysis internal memoranda and other materials.

## Survey Data Collection Over the Internet at the U.S. Bureau of Economic Analysis

### 1. Overview

The International Investment Division (IID) of the U.S. Bureau of Economic Analysis (BEA) collects, maintains, improves, and interprets data on U.S. direct investment abroad and foreign direct investment in the United States, including data on the financial structure and operations of parents and affiliates and on balance of payments transactions between parents and affiliates. IID also collects, maintains, improves, and interprets data on U.S. services transactions with unaffiliated foreign persons. These data are essential to the compilation of the U.S. international economic accounts and can be used to measure the scale of global business activity of U.S. multinational companies and foreign-owned business activity in the United States. The data are obtained from mandatory surveys conducted by IID.

A large portion of IID's resources is devoted to primary data collection. Separate, but roughly parallel, data collection programs are conducted for U.S. direct investment abroad and foreign direct investment in the United States, each including benchmark surveys, which are usually conducted every 5 years, interim annual surveys, and quarterly balance of payments surveys.<sup>1</sup> IID also conducts two benchmark surveys (usually at 5-year intervals) and five annual surveys of U.S. international services transactions with unaffiliated foreigners. In 2004, it plans to introduce quarterly surveys for the largest and most volatile categories of services. All the individual company data collected in these surveys are protected by strict confidentiality laws and cannot be given to the public; only statistical aggregates based on the reported data are made public.

BEA requires timely, accurate, and complete survey responses in order to provide quality statistics on direct investment and services transactions. However, as companies allocate fewer resources to Government reporting, BEA has experienced a decline in both the timeliness and the quality of the data it receives. Improving survey response is a priority if BEA is to continue to provide quality statistics. Electronic data collection has the potential for savings in time and resources for BEA survey respondents.

Until recently, BEA's data collection program was entirely a paper-based system. However, changes in technology have broadened the possibilities for data collection. In BEA's survey work, shifting away from paper forms and providing survey respondents an electronic reporting option has the potential for reducing their paperwork burden and for substantially increasing the speed of the data collection process. More timely responses improve data coverage, particularly for initial estimates, and reduce the revisions between the initial and subsequent estimates. Also, costs associated with data conversion and handling of paper forms (i.e., printing, mailing, keying of data, etc.) can be reduced, as can errors associated with manual data entry. Finally recent legislation, known as the Government

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1. For foreign direct investment in the United States, there is also a one-time survey covering new investments.

Paperwork Elimination Act, has required U.S. Government agencies seeking to collect data from the public to offer an electronic reporting option wherever practicable.

BEA has made substantial progress in collecting data via the Internet and now offers respondents an electronic option for reporting on almost all of its surveys. The work to develop an electronic data collection system began in 1998. The Automated Survey Transmission and Retrieval (ASTAR) system was first designed to support submission of the quarterly BE-577, Direct Transactions of U.S. Reporter with Foreign Affiliate, survey form. The BE-577 was chosen for an initial pilot test because its high frequency (quarterly), short turnaround time for data conversion, and large number of respondents, gave it a large potential to reduce respondent burden and processing costs and to improve timeliness. Pilot tests of the new system were conducted later that year. The pilot program consisted of three phases: development of a pilot system, integration of the pilot system into the existing processing system, and expansion of the electronic filing system to cover a wider range of respondents and BEA surveys.

The pilot test consisted of a selected group of 10 respondents who were asked to file their quarterly BE-577 reports electronically in parallel with the paper reporting process. Initial contact was made by BEA to determine which companies would be the most suitable and willing to participate in the pilot, assess their technical requirements, and provide instructions on the use of the software. Throughout the testing of the ASTAR software, BEA staff made periodic contact with the respondent representatives to provide technical support and encouragement with the testing effort. At the end of the pilot a questionnaire was sent to participants to solicit their input on the success of the test and to help determine the future course of the project. The steps in the electronic data reporting process that were developed and evaluated for the pilot effort were:

1. Notification of respondents, including transmission of passwords
2. Download of Java-based application software
3. Data retrieval from BEA by respondents, including preparation of data prior to retrieval
4. Application software operation, including decryption and data entry
5. Data transmission to BEA by respondents, including data encryption
6. BEA processing of respondent's submissions

The pilot revealed a mix of successes and failures. Significant technical challenges were encountered and most problems were overcome. The major technical problem to be resolved involved the data transfer mechanism.

After modifications based on user feedback, the BE-577 ASTAR system went into initial production with the 2nd quarter 2000 processing cycle. Four hundred reporters were invited to participate in the initial cycle, with an additional four hundred added in each subsequent cycle through the 1st quarter 2001 cycle when the system was opened to the universe of about 1,600 reporters.

As it was being incrementally rolled out into production, the ASTAR system was being modified to support another BEA quarterly survey, the BE-605, Transactions of U.S.

Affiliate with Foreign Parent. The ASTAR system for that survey went into production for the 2nd quarter 2001 cycle.

The ASTAR system has substantially been expanded to cover almost all of the surveys conducted by IID, as well as several smaller surveys conducted by BEA's Balance of Payments Division.

## **2. System Description**

The ASTAR system's respondent interface is a JAVA applet/application that survey respondents run by clicking a link on the BEA web site. Respondents may choose to execute the ASTAR interface on-line, but they can also elect to download and install an off-line version of the application. The off-line version is also run through the reporter's local Internet browser, but an Internet connection is required during the initial system download and the subsequent submission of completed forms.

Additional features built into the current ASTAR system include the ability to run edit checks before the data are submitted, to print completed forms in .pdf format, and to import and export data from or to other applications. The import facility allows respondents to link directly to their accounting systems, preparing and formatting data for ASTAR transmission without the need for manual data entry.

## **3. Data Transmission and Security**

Since security of transmitted data is an important concern for both BEA and its survey respondents, the ASTAR system has been designed with built-in data encryption capabilities. Both data downloaded by survey respondents from BEA (i.e., company name, address, etc.) and the completed survey form transmitted to BEA are encrypted before their transmission over the Internet. Encryption is based on unique identification numbers and private password keys assigned to each respondent.

In the BE-577 implementation of ASTAR, survey respondents transmitted their ASTAR-encrypted survey data to BEA as e-mail attachments. Such transmissions were directed to a special mailbox from which an automated procedure unencrypted the attachment and loaded the reported data into a SQL Server database. The system also generated e-mail notification to the survey respondent confirming receipt of the data. The current version of ASTAR allows respondents to transmit completed survey data directly over the Internet without using e-mail. The encrypted data are immediately "posted" by ASTAR into a SQL Server "collector" database from which they are later processed and loaded into the final destination databases. If a submission error is detected, BEA contacts the respondent.

## **4. Data Editing**

In the paper-based data collection system data editing is performed during the post-data-collection processing. Electronic reporting provides the opportunity to perform data editing during data collection. Data editing during collection has the potential to improve data quality by limiting item nonresponse and data inconsistencies. ASTAR incorporates a

few basic data edits. Entry is blocked of alpha and other non-numeric characters from data items that are numeric and of negative values from items that cannot be negative. ASTAR sums detail items and enters the total in the appropriate item. Transmission of data to BEA is halted, and an error message appears, if required country and/or industry codes are not provided. Edits that test the validity of inter-item relationships, verify that the value reported for an item lies within a specified range of values, and compare current-period values to prior-period values will be incorporated as time and resources permit.

## 5. Getting Started

Each reporting period, along with the paper report forms, survey respondents are mailed a letter with an invitation to file electronically using ASTAR (Attachment A). Respondents are directed to the ASTAR home page [www.bea.gov/astar](http://www.bea.gov/astar). Selecting a survey from the ASTAR home page (Attachment B) provides a link to “**Welcome to ASTAR.**” **Welcome to ASTAR** provides information, by survey, on getting started using ASTAR (Attachment C). Detailed technical information and requirements are provided through a link in **Welcome to ASTAR** (Attachment D).

## 6. Electronic Filing

**Welcome to ASTAR** directs the respondent to obtain an ID and password from BEA. A new password must be obtained for each filing. Once the respondent has obtained an ID and password and either run the on-line version, or downloaded, installed, and run the off-line version of ASTAR, the *Start* page appears.

As data are keyed, ASTAR saves the data onto the respondent’s workstation. ASTAR may be exited by closing the browser and can be re-entered as often as needed in order to complete the survey.

Several ASTAR screens are replicated on the following pages for BEA’s BE-577 survey, Direct Transactions of U.S. Reporter with Foreign Affiliate.

On the **Start** page the respondent enters the US\_ID obtained from BEA and selects, in the case of a quarterly survey, the quarter and year of the data to be retrieved.

**BE-577 Start**

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US_ID:	004140_2
Quarter:	4th Quarter (ending 11/16-2/15) ▾
Year:	2002 ▾
Retrieve reporter data from BEA, Decrypt and Open File:	<input type="button" value="Retrieve"/>
Open previously retrieved period selected above:	<input type="button" value="Open"/>
Exit:	<input type="button" value="Exit"/>
	<input type="button" value="Help"/>

**Retrieve** - takes the respondent to the **Retrieve** page to retrieve the company's data for the first time. The respondent enters the case-sensitive password received from BEA. The password must correspond to the quarter/year selected on the **Start** page. ASTAR then fetches the initial data from BEA, decrypts it for processing, and saves it locally onto the respondent's workstation. Highlighting OK on the **Retrieve** page takes the respondent to the **Reporter Info** page.

**Open** - opens the respondent's previously retrieved data and takes the respondent to the **Home** page.

**BE-577 Retrieve**

US ID 004140\_2 4th Quarter (ending 11/16-2/15) 2002

Password:	
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The respondent edits the company's contact and address information on the *Reporter Info* page. The information entered here is needed to update the survey mailing list. In the paper-based system such information is obtained from a cover letter, usually submitted by the respondent, and from the return address of the respondent.

## Reporter Info

Next >>      Help

US\_ID:004140\_2 U.S. REPORTER NAME for quarter ending between 11/16/2002 - 2/15/2003

---

U.S. Reporter Info	
Name of Reporter:	U.S. REPORTER NAME
In care of:	
Attention:	
Title:	
Street 1:	
Street 2:	
City:	
State:	
Zip:	
Contact Salutation:	
Reporter Point of Contact:	
Reporter E-mail Address:	
Reporter Phone Number:	
Reporter Fax Number:	

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US\_ID:004140\_2 U.S. REPORTER NAME for quarter ending between 11/16/2002 - 2/15/2003

Next >>      Help

**Next** - takes the respondent to the *Home* page.

The **Home** page launches all form processing, printing and submission preparation functions. It displays the current list of forms available for processing and their statuses (e.g. Edited, New, Sent). **Sort by** sorts the display columns - *Affiliate ID*, *Affiliate Name*, *Country* and *Filing Status* - in both ascending and descending order. As data are keyed, ASTAR

The screenshot shows the 'BE577 Home' interface. At the top, it says 'BE577 Home'. Below that, there are instructions: 'To process affiliates, select a affiliate and click a button below:' and 'To submit edited forms to BEA, click "Send", select one or more affiliates, then click "Confirm" (the same button):'. There are five buttons: 'Edit', 'New', 'Delete', 'Print', and 'Send'. Below the buttons, it says 'US\_ID:004140\_2 U.S. REPORTER NAME for quarter ending between 11/16/2002 - 2/15/2003'. There is a 'Sort by' dropdown menu currently set to 'Affiliate ID'. Below that is a table with columns 'Affiliate ID | Affiliate Name | Country' and 'Filing Status'. The table contains three rows: '0001 | Affiliate 1 | Brazil', '0004 | Affiliate 2 | Argentina', and '0009 | My New Test Affiliate | Nicaragua'. The 'Filing Status' column is partially visible with 'Edited Sent'. At the bottom, there are four buttons: 'Edit Reporter Info', 'Tools', 'Exit', and 'Help'.

Affiliate ID	Affiliate Name	Country	Filing Status
0001	Affiliate 1	Brazil	
0004	Affiliate 2	Argentina	
0009	My New Test Affiliate	Nicaragua	Edited Sent

saves the data onto the respondent's workstation. The respondent may re-enter ASTAR as often as needed in order to complete the survey.

**Edit** - highlighting (clicking on) an existing form and then clicking **Edit** takes the respondent to the *Foreign Affiliate Info* page to enter data.

**New** - highlighting **New** creates a blank form for completion which is added to the bottom of the list of existing forms and assigned a temporary ID.

**Delete** - highlighting a newly-created form then clicking **Delete** removes it from the form list.

**Print** - highlighting a form then clicking **Print** places the respondent on the *Print* page for further instructions.

**Send** - highlighting **Send** selects all edited forms which have not yet been submitted (Sent) to BEA. The respondent can manually highlight previously-sent (Edited Sent) forms to resubmit them. Only edited forms that display a foreign affiliate name, a country name, and industry code can be submitted. Once the chosen forms are highlighted, clicking Send will replace the Send button with **Confirm**. Clicking Confirm takes the respondent to the *Send* page for further instructions.

**Edit Reporter Info** - returns the respondent to the *Reporter Info* page.

**Tools** - takes the respondent to the *Tools* page.

**Exit** - takes the respondent to the *ASTAR Exit* page. The respondent may quit ASTAR at any time without losing work in progress simply by closing the browser.



The paper version of the BE-577 consists of a two-sided 8½ x 14 inch form for reporting 51 items of data. The paper form is reproduced in its entirety in ASTAR and comprises seven pages or screens for data entry--**Foreign Affiliate Info and BE-577 Part** pages. The drop down list on each ASTAR screen allows the respondent to navigate between screens.

**BE-577 Part I**

<< Back    Next >>    Go to: Part I    Home    Help

US\_ID:004140\_2 U.S. REPORTER NAME for quarter ending between 11/16/2002 - 2/15/2003

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**Part I**

10. Quarterly net income (loss) after provision for foreign income taxes	<input style="width: 90%;" type="text"/>
- For items 11 and 12: Certain realized and unrealized gains (losses) (excluding translation adjustments) after provision for foreign income taxes.	
11. Included in item 10.    - See specific instructions.	<input style="width: 90%;" type="text"/>
12. Not included in item 10, but taken directly to retained earnings for an incorporated affiliate, or to owners' equity for an unincorporated affiliate - See specific instructions.	<input style="width: 90%;" type="text"/>
13. Change in balance sheet translation adjustment account during quarter	<input style="width: 90%;" type="text"/>
14. Dividends on common and preferred stock (exclude stock and liquidating dividends) of incorporated foreign affiliate or distributed earnings of unincorporated foreign affiliate - Gross Amount	<input style="width: 90%;" type="text"/>
15. Tax withheld on dividends or distributed earnings in item 14	<input style="width: 90%;" type="text"/>
16. Dividends on common and preferred stock of incorporated foreign affiliate or distributed earnings of unincorporated foreign affiliate - Net amount <i>(item 14 less item 15)</i>	<input style="width: 90%;" type="text" value="0"/>

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US\_ID:004140\_2 U.S. REPORTER NAME for quarter ending between 11/16/2002 - 2/15/2003

<< Back    Next >>    Go to: Part I    Home    Help

Foreign Affiliate Info  
**Part I**  
 Part II/III  
 Part IV  
 Part V/VIA  
 Part VIB  
 Part VIC and Certificate of Exer

Screens for Part I, Part II/III, and Part VIC are reproduced here.

**Back** and **Next** - take the respondent forward and backward through the form one page at a time.

**Go To** - navigates between screens.

**Home** - returns the respondent to the *Home* page.

## BE-577 Part II and Part III

&lt;&lt; Back

Next &gt;&gt;

Go to:

Part II/III

Home

Help

US\_ID:004140\_2 U.S. REPORTER NAME for quarter ending between 11/16/2002 - 2/15/2003

## Part II

**RECEIPTS AND PAYMENTS (NET OF WITHHOLDING TAXES) BETWEEN U.S. REPORTER AND FOREIGN AFFILIATE DURING QUARTER**

*Enter amounts received, paid or entered into intercompany accounts, whichever occurred first.*

*Report all amounts in thousands of U.S. Dollars*

Credited to US Reporter or charged to foreign affiliate (whether or not paid)	Credited to foreign affiliate or charged to U.S. Reporter (whether or not paid)
(1)	(2)

17. Interest on amounts in items 21 and 22, including interest on capital leases - *For affiliates that are foreign banking affiliates of U.S. parents that are also banks, report interest on permanent invested debt capital only.*

<input type="text"/>	<input type="text"/>
----------------------	----------------------

18. Royalties, license fees, and other fees for use or sale of intangible property

<input type="text"/>	<input type="text"/>
----------------------	----------------------

19. Charges for use of tangible property, including film and television tape rentals

<input type="text"/>	<input type="text"/>
----------------------	----------------------

20. Allocated expenses and sales of services - Include (a) allocated expenses (such as R&D assessments) and reimbursements between U.S. Reporter and affiliate for services that are normally included in "other income" of the provider of the service and (b) receipts by U.S. Reporter from, or payments by U.S. Reporter to, affiliate for services that are normally included in sales or gross operating revenues of the seller of the service.

<input type="text"/>	<input type="text"/>
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**(Complete Part VI, Section B, annually)**

## Part III

**DEBT AND OTHER INTERCOMPANY BALANCES BETWEEN U.S. REPORTER AND FOREIGN AFFILIATE**

*Include current and long-term items, indebtedness resulting from a capital lease, and the net book value of equipment under a long-term operating lease. (For affiliates that are foreign banking affiliates of U.S. parents that are also banks, item 21 should reflect only those amounts that the U.S. Reporter considers to be permanent invested debt capital and item 22 should be blank.)*

*Report all amounts in thousands of U.S. Dollars*

Beginning of quarter (1)	End of quarter (2)
--------------------------	--------------------

21. Owed to U.S. Reporter by affiliate

<input type="text"/>	<input type="text"/>
----------------------	----------------------

22. Owed to affiliate by U.S. Reporter

<input type="text"/>	<input type="text"/>
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US\_ID:004140\_2 U.S. REPORTER NAME for quarter ending between 11/16/2002 - 2/15/2003

&lt;&lt; Back

Next &gt;&gt;

Go to:

Part II/III

Home

Help

## BE-577 Part VIC and Certificate of Exemption

&lt;&lt; Back

Next &gt;&gt;

Go to: Part VIC and Certificate of I

Home

Help

US\_ID:004140\_2 U.S. REPORTER NAME for quarter ending between 11/16/2002 - 2/15/2003

Part VI

Section C

**U.S. REPORTER'S EQUITY IN NET WORTH OF FOREIGN AFFILIATE AT YEAREND  
(OR QUARTER END IF AN INITIAL REPORT)****U.S. Reporter's equity in net worth of foreign affiliate as of the  
date given in item 32 .***Report all amounts  
in thousands of  
U.S. dollars***- Incorporated foreign affiliate -**

43. Total equity - Equals the sum of items 44 through 47.

44. Capital stock, common and preferred, and additional paid-in capital

45. Retained earnings

46. Translation adjustment - cumulative amount

47. Other - SPECIFY

**48. Unincorporated foreign affiliate** - U.S. Reporter's share of total owners' equity. (In calculating net worth, assets, or liabilities of the affiliate carried on any owners', as well as those carried on the affiliate's, books should be included. Net worth should include cumulative earnings not distributed.)

**CERTIFICATE OF EXEMPTION**

*Complete A or mark (X) B below to indicate reason  
affiliate is exempt. See "Reporting Requirements" for  
determining exempt status.*

Amount

*Report all  
amounts in  
thousands of  
U.S. dollars*

(1)

Amounts in

*49, 50, and 51  
are for affiliate's  
fiscal year  
ending*

(2)

**A.** The affiliate is exempt because none of the three items listed below was greater than \$30 million (positive or negative) at any time during the affiliate's fiscal year.

49. Total assets,

50. Annual sales or gross operating revenues, excluding sales taxes, and

51. Annual net income after provision for foreign income taxes.

**B.** The affiliate is exempt because it is indirectly owned and none of the following items exceeds \$1 million.

. Item 21, column (2) (foreign affiliate's end-of-quarter payables to the U.S. Reporter

. Item 22, column (2) (foreign affiliate's end-of-quarter receivables from the U.S. Reporter

. The sum of items 18, 19, and 20, column (1) (U.S. Reporter's receipts of royalties, license fees, and charges for other services, from the foreign affiliate)

. The sum of items 18, 19, and 20, column (2) (U.S. Reporter's payments of royalties, license fees, and charges for other services, to the foreign affiliate)

US\_ID:004140\_2 U.S. REPORTER NAME for quarter ending between 11/16/2002 - 2/15/2003

&lt;&lt; Back

Next &gt;&gt;

Go to: Part VIC and Certificate of I

Home

Help

The **Print** page provides detailed instructions on printing forms one at a time in .pdf format using Adobe Acrobat software.

### BEA Print

The printable BEA Form is made available as an Adobe Acrobat Portable Document Form (.pdf) file so that it can be printed and then used in the same manner as any traditional paper form. It must be viewed and printed with Adobe Acrobat or Adobe Acrobat Reader software. If your browser is not already configured for Acrobat and/or Acrobat Reader Version 5.05 or later, click [here](#) to download and install the free Acrobat Reader before continuing.

Once installed, Acrobat Reader should launch automatically when you click the "OK" button below. To print the .pdf file, click on the printer icon within Acrobat Reader - do not use the print icon in your browser button bar. If Acrobat Reader does not launch automatically, or if you are unable to print the .pdf file, your system administrator may need to reconfigure your browser and/or your printer.

**Note to Internet Explorer users:**  
When the installation is complete, you must add the ASTAR website to the list of Trusted Sites in your browser. This list is located under Tools/Internet Options/Security/Trusted Sites/Sites - uncheck the check box before adding <http://www.bea.gov/astar> to the list.

**Note to Windows XP users:**  
You may need to be a System Administrator in order to use Acrobat Reader. Please refer to Adobe's "Windows XP Install Notes" at <http://www.adobe.com/products/XPinstallnotes.html>

**The downloading and generation of the PDF files may take several minutes, depending on the speed of your internet connection and pc.**

The **Send** page provides instructions on transmitting the respondent's data to BEA and invites comments about ASTAR filing. The respondent enters the password originally used to retrieve data and then clicks **OK** to proceed. ASTAR encrypts the respondent's data and immediately sends the data to BEA. If a submission error is detected, an e-mail is generated back to BEA for investigation.

### BEA Send Page

1. Please re-enter the password provided to you by BEA (the same one you used earlier to retrieve).

Password:

2. Please verify your E-mail address in case BEA must contact you regarding your submission.

3. Optionally, please provide any comments below.

Comments:

4. Click OK to submit your data to BEA.

After the respondent successfully submits the data, ASTAR takes the respondent to a **Thank You** page.

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## ASTAR - Automated Survey Transmission and Retrieval

THANK YOU!!!

Your ASTAR submission has been transmitted to BEA. Please contact the ASTAR HelpDesk at 202-606-9914 if you do not receive an E-mail confirmation within 48 hours.

## 7. BE-577 Response to ASTAR

The table below shows the number of respondents filing on ASTAR for the six most recent quarters. The number filing electronically at the time of the revised quarterly estimate has increased slightly, from 19.7 percent to as high as 25.1 percent. The most significant improvement to the timeliness of the data provided by ASTAR is for the preliminary estimate, when 35 to 50 percent of those companies responding are filing on ASTAR. Companies filing a large number of BE-577 reports tend not to file on ASTAR; instead, they prefer to provide their data on computer-generated paper replicas of Form BE-577.

Year and quarter	4Q2001		1Q2002		2Q2002		3Q2002		4Q2002		1Q2003
	prelim	revised	prelim	revised	prelim	revised	prelim	revised	prelim	revised	prelim
Mailout count	13872	13872	14001	14001	14062	14062	14100	14100	14320	14320	14285
Total documents filed (includes ASTAR)	4039	9525	6129	9917	6310	10876	6914	11604	4548	9932	6993
ASTAR-filed documents	1927	2746	2239	2767	2376	3281	2674	3548	2278	3272	2592
ASTAR filed documents as a % of documents filed	47.7	28.8	36.5	27.9	38.0	30.1	39.0	31.0	50.0	33.0	37.0
ASTAR filed documents as a % of mailout	13.8	19.7	15.9	19.7	17.0	23.3	19.0	25.1	16.0	23.0	18.0

**ASTAR ELECTRONIC FILING NOW AVAILABLE FOR ALL COMPANIES FILING FORM BE-577*****What is ASTAR?***

ASTAR (Automated Survey Transmission and Retrieval) is an electronic data collection system developed for the collection of survey data which traditionally has been performed using paper forms.

***Who can use ASTAR?***

All companies who report on quarterly Form BE-577.

***Am I required to use ASTAR?***

Using ASTAR is voluntary - you may continue to file on paper forms if you wish.

***Why should I use ASTAR?***

ASTAR makes BE-577 reporting easier for many companies. Data can be imported and exported from local systems, validated before transmission, and sent securely and instantly to BEA via the Internet. Data also can be printed in WYSIWYG forms for your files.

***How does ASTAR work?***

ASTAR automatically retrieves your company's information from the ASTAR web site ([www.bea.gov/astar](http://www.bea.gov/astar)), pulls the information over the Internet, and presents a replica of the BE-577 form for each affiliate on your PC. After you complete the form(s), ASTAR directs you to encrypt and transmit the data back to BEA via the Internet. You will receive an automated response once BEA has received your data.

***How is my confidential information protected when transmitted over the Internet?***

BEA employs state-of-the-art encryption security features to protect your company's confidential information transmitted in the electronic forms.

***Are there any system requirements?***

To use ASTAR, you need access to the Internet and an IBM-compatible PC, 80486 or better, with Windows 95 Service Release 2, 98, 2000 Service Pack 2 or later, 2003, NT, or XP. You also need Microsoft Java Build #3809 or later or Sun Java Build #1.4.1 or later. ASTAR has been developed to run with Internet Explorer versions 5.5 and above and Netscape versions 6.0 and above. Acrobat 5.05 or later is required for printing. (More information is available on the ASTAR web site.)

***How do I begin?***

To file your BE-577 reports using ASTAR, you will need an identification number ("US\_ID") and password for the retrieval process. To obtain this information, send an e-mail request with "BE-577" in the subject line to [password@bea.gov](mailto:password@bea.gov). You must provide the Address Label ID (found in the upper right-hand corner of any previously-filed BE-577 form), the period for which you wish to file, company name, and your name and phone number(s). BEA will reply with your company's US ID, password, and instructions to get you started. **You must request a new ASTAR password for each quarter's BE-577 filing.**

***What if I have questions or problems?***

Call the ASTAR HelpDesk or e-mail BEA for software-related questions or problems.

**If you've already tried ASTAR, you know how convenient and easy it is to use.**

**If you haven't - DON'T DELAY - REQUEST YOUR PASSWORD TODAY!**

## Attachment B (ASTAR Home Page)

[Home](#) > [International Economic Accounts](#) > [ASTAR - Automated Survey Transmission and Retrieval](#)

## ASTAR - Automated Survey Transmission and Retrieval

The Bureau of Economic Analysis (BEA) has developed this electronic data collection system for the collection of survey data which traditionally has been performed using paper forms. It is designed to suit the needs of our users and ease the reporting burden.

Please select the report you wish to file from the list below:

- [Form BE-12\(X\), BE-12\(SF\), BE-12\(LF\), BE-12\(BANK\) - Benchmark Survey of Foreign Direct Investment in the United States -2002](#)  
MANDATORY OMB No. 0608-0042: Approval Expires 12/31/2005
- [Form BE-13\(C\), BE-13 Initial Report on a Foreign Person's Direct or Indirect Acquisition, Establishment, or Purchase of the Operating Assets, of a U.S. Business Enterprise, including Real Estate](#)  
MANDATORY OMB No. 0608-0035: Approval Expires 12/31/2003
- [Form BE-22 - Annual Survey of Selected Services Transactions with Unaffiliated Foreign Persons](#)  
MANDATORY OMB No. 0608-0060: Approval Expires 12/31/2005
- [Form BE-29 - Foreign Ocean Carriers' Expenses in the United States](#)  
MANDATORY OMB No. 0608-0012: Approval Expires 03/01/2004
- [Form BE-30 - Ocean Freight Revenues and Foreign Expenses of United States Carriers](#)  
MANDATORY OMB No. 0608-0011: Approval Expires 03/01/2004
- [Form BE-36 - Foreign Airline Operators' Revenues and Expenses in the United States](#)  
MANDATORY OMB No. 0608-0013: Approval Expires 03/01/2004
- [Form BE-37 - U.S. Airline Operators' Foreign Revenues and Expenses in the United States](#)  
MANDATORY OMB No. 0608-0011: Approval Expires 03/01/2004
- [Annual Form BE-40 - Institutional Remittances to Foreign Countries](#)
- [Quarterly Form BE-40 - Institutional Remittances to Foreign Countries](#)  
OMB No. 0608-0002: Approval Expires 7/31/2005 \*
- [Form BE-47 - Annual Survey of Construction, Engineering, Architectural and Mining Services Provided by U.S. Firms to Unaffiliated Foreign Persons](#)  
MANDATORY OMB No. 0608-0015: Approval Expires 12/31/2004
- [Form BE-48 - Annual Survey of Reinsurance and Other Insurance Transactions by U.S. Insurance Companies with Foreign Persons](#)  
MANDATORY OMB No. 0608-0016: Approval Expires 10/31/2004
- [Form BE-82 - Annual Survey of Financial Services Transactions Between U.S. Financial Services Providers and Unaffiliated Foreign Persons, 2002](#)  
MANDATORY OMB No. 0608-0062: Approval Expires 09/30/2003
- [Form BE-93 - Annual Survey of Royalties, License Fees and Other Receipts and Payments for Intangible Rights Between U.S. and Unaffiliated Foreign Persons](#)  
MANDATORY OMB No. 0608-0017: Approval Expires 11/30/2003
- [Form BE-577 - Direct Transactions of U.S. Reporter with Foreign Affiliate](#)  
MANDATORY - Confidential Quarterly Report OMB No. 0608-0004: Approval Expires 11/30/2003
- [Form BE-605 - Transactions of U.S. Affiliate, Except a U.S. Banking Affiliate, with Foreign Parent](#)
- [Form BE-605 Bank - Transactions of U.S. Banking Affiliate with Foreign Parent](#)  
MANDATORY - Confidential Quarterly Report OMB No. 0608-0009: Approval Expires 12/31/2005



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## ASTAR - Automated Survey Transmission and Retrieval

Welcome to ASTAR!

Two ASTAR methods are available to electronically file the BE-577. Both methods require access to the Internet and employ state-of-the-art security features to protect confidential information contained and transmitted in the electronic form.

- The recommended filing method is an on-line Java applet which runs in your Internet browser - you remain connected to the Internet while using ASTAR to complete and submit your form.
- The alternative filing method is to download a stand-alone version of the same Java applet that is then run off-line in your browser, i.e., for most ASTAR functions you are not connected to the Internet while you complete your form. Use this method only if you are unable to use the online method above.

For more detailed technical information and requirements, click [here](#).

For either filing method, the process is as follows:

**Step 1:** Obtain a US\_ID and password from BEA - you must request a new password for each quarter's filing. Send an E-mail with "BE-577" in the subject line to [password@bea.gov](mailto:password@bea.gov). Include your company's Address Label ID (found in the upper right-hand corner of any previously-filed BE-577 form), the period for which you wish to file, your company's name, and your name and phone numbers in the E-mail text.

**Step 2:** Run ASTAR. Return to this web site and from the links at the bottom of this page, either run the on-line version, or download, install, and run the off-line version ASTAR. You must answer Yes/Grant to any browser security screens - if you answer No/Deny/Cancel you cannot use ASTAR to file your survey forms. When answering Yes/Grant, you should also click Always trust content from BEA/Grant Always which will prevent this screen from reappearing.

**Step 3:** Complete the BE-577 forms. Using the US\_ID, password and reporting period you enter from Step 1, ASTAR will retrieve your encrypted reporter data and affiliate list from BEA, decrypt the information, and save it locally onto your workstation. You may then complete your BE-577 forms. ASTAR saves your data onto your workstation while you work and you may re-enter ASTAR as often as you wish in order to complete your survey.

**Step 4:** Submit the BE-577 forms to BEA. ASTAR will require you to re-enter your password in order to encrypt and prepare your data file for transmission. If your system's security prohibits a direct transmission, you will be provided with detailed instructions on three alternate methods for forwarding your data to BEA. While you have the ability to submit each form individually, please send all edited forms in a single submission (if feasible).

**Step 5:** Receive confirmation from BEA. You will receive an automated E-mail confirmation within 48 hours of your direct or E-mail data transmission. If you do not receive this notification, please contact the ASTAR HelpDesk at 202-606-9914.

Additional help is available via the Help button within ASTAR, including complete BE-577 filing instructions.

When you are ready to begin, click on one of the two filing methods below:

Recommended! [On-line  
ASTAR](#)

First, click [HERE](#) to test your system for Java compatibility.

[Off-line  
ASTAR](#)

After downloading, execute the self-extracting ZIP file, run the SETUP.EXE and follow the installation instructions.

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## ASTAR - Automated Survey Transmission and Retrieval

### ASTAR Technical Information and Requirements

- File encryption uses 56-bit (exportable) using [DES](#). All information sent over the internet is encrypted.
- No information is transmitted over the internet except during RETRIEVE and SEND. Information can be sent to BEA via POST port 80), Email, mailed diskette or mailed/faxed printed forms.
- You may IMPORT or EXPORT data using either survey-specific formats or via the published file format which is available on the TOOLS page (please call the HelpDesk if you need to use the TOOLS page functionality.)
- All Java applet code is digitally signed using [Verisign, Inc.](#) certificates to authenticate that the originator is genuinely the Bureau of Economic Analysis (BEA) and that it has not been tampered with since signed by BEA. You must always "accept" the certificate for the applet to function correctly. For more information click [here](#).
- Minimum system requirements:
  - PC with 80486 or higher processor recommended with Windows 95 Service Release 2, Windows 98 Second Edition, Windows NT, Windows 2000 SP2 or later, Windows XP, and Windows 2003. Other operating systems may work, but we do not support them at this time.
  - Internet Service Provider (for access to the Internet).
  - Internet Explorer 5.5 or later or Netscape 6 or later.
  - Microsoft Java Build #3809 or later or Sun Java Build 1.4.1 or later. Refer to the [Java Check Page](#) for compatibility and upgrade information.
  - Free Adobe Acrobat 5.05 or later (required only for printing).