

U.S. International Trade Commission

Audit of Data in the 337Info System



OIG-AR-20-12

February 26, 2020



Office of Inspector General

The U.S. International Trade Commission is an independent, nonpartisan, quasi-judicial federal agency that provides trade expertise to both the legislative and executive branches of government, determines the impact of imports on U.S. industries, and directs actions against certain unfair trade practices, such as patent, trademark, and copyright infringement. USITC analysts and economists investigate and publish reports on U.S. industries and the global trends that affect them. The agency also maintains and publishes the Harmonized Tariff Schedule of the United States.



UNITED STATES INTERNATIONAL TRADE COMMISSION

OFFICE OF INSPECTOR GENERAL

WASHINGTON, DC 20436

February 26, 2020

IG-SS-004

Chairman Johanson:

This memorandum transmits the final report for the Audit of Data in the 337Info System, OIG-AR-20-12. In finalizing this report, we analyzed management's comments to our draft report and have included those comments in their entirety as Appendix B.

We determined that the Commission's Section 337Info System was not providing quality data to users.

We are issuing six recommendations to the Commission to improve the quality of Section 337 Investigation data. In the next 30 days, please provide me with your management decisions describing the specific actions that you will take to implement our recommendations.

Thank you for the courtesies extended to my staff during this audit.

Philip M. Heneghan
Inspector General

U.S. International Trade Commission

Audit Report

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Results of Audit

The objective of this audit was to answer the question:

Does the 337Info System provide quality data to users?

No, the 337Info System does not provide quality data to users.

For the purpose of this audit, “quality data” was defined as data that is complete and accurate.

We analyzed the data from 38 of the 90 fields in the 337Info System to determine if the data in those fields was complete and accurate. Our analysis found an error rate of 15.4%. Errors were the result of either incomplete or inaccurate information.

When we analyzed the information contained in each data field, we found that 15 of the 38 data fields (39%) had an error rate above 15%. The errors we identified in these 15 data fields accounted for 77% of the errors in the 78 investigations we reviewed and were predominantly associated with inactive dates for parties and intellectual property.

Table 1: Error Rates per Data Field

Error rate per data field	Number of data fields with errors	Percentage of data fields with errors
15% and above	15	39%
6% to 14%	9	24%
1% to 5%	13	34%
Error Free	1	3%

We found that the data fields related to active or inactive dates of parties or intellectual property made up six of ten data fields with the most errors. Similarly, the termination date data field was also among the fields with the most errors. The data fields with the ten highest error rates are listed in the table below. The entire list of error rates for the 38 data fields we reviewed are in Appendix A.

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Table 2: Data Fields with the Most Errors

Data Field	Errors	Applicable Investigations	Error Rate
Unfair Act Alleged Inactive Date*	57	78	73.1%
Final Determination No Violation	7	10	70.0%
Final Determination Violation	5	10	50.0%
Respondents Inactive Date*	37	78	47.4%
Patent Number Inactive Date*	31	70	44.3%
Complainants Inactive Date*	29	78	37.2%
Termination Date	23	78	29.5%
Non Final ID Issued Date	16	58	27.6%
Respondents Active Date*	17	78	21.8%
Unfair Act Alleged Active Date*	15	78	19.2%

* Indicates that this data field was derived from multiple data points.

Note: Only fields applicable to a minimum of ten investigations are included.

In addition, we found that 52 of the 78 investigations had an error in over 10% of the data fields we reviewed. Only four investigations reviewed did not contain any errors in any of the 38 data fields reviewed.

Based on the results of the audit, we identified one problem area which is discussed below.

Problem Area 1:

The Commission Did Not Have an Effective Process to Provide Quality Data Through the 337Info System

The Commission created the 337Info System to provide users with access to public data collected during its Section 337 investigative process without the need to search for this information in multiple locations, including the formal record. In order to be an effective tool and to protect the integrity of the Commission, the data presented must be complete and accurately reflect the official record.

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The 337Info System replicates important data points from the official record, including information related to the parties involved and the intellectual property at issue. It also contains important dates associated with an investigation such as hearing dates and active/inactive dates of parties and intellectual property. Three offices have had responsibility for entering data collected by the Commission into the 337Info System. The authoritative source for most data is from documents filed in the Commission's Electronic Document Information System (EDIS), and this data is entered by staff shortly after the documents are filed.

The 337Info System does not have data entry controls in place to protect data as it is entered into the system. Any employee with access to the data entry part of the system has permission to edit the data in 337Info. No restrictions are in place to limit staff to fields that their office is responsible for, nor is there an audit trail to identify what changes are made by each user. This lack of permission controls, limits the Commission's ability to protect the integrity of data entered and edited in the system.

During the audit we interviewed all the offices that have a role in entering data into the 337Info System. Each office with responsibility for inputting data has different roles in the Section 337 investigative process and took a different approach to controlling the review of data in the 337Info System. As a result, the Commission did not have a consistent review process to ensure that the 337Info System contained quality data. For example, one office sent an email reminding those involved in some investigations to make sure they are current and accurate. Another office used a spreadsheet to check some of the information entered in each investigation. The spreadsheet was created for a separate purpose, which limited in its ability to assist in reviewing data in the 337Info System. The data errors in the 337Info System were not detected because the Commission did not have an effective review process over data entered in the system.

To perform our analysis of the public data presented in the 337Info System, we examined Section 337 violation investigations that were terminated between the two-year period from July 1, 2017, to June 30, 2019. Additionally, we sought to exclude all investigations that may have had related ancillary proceedings or were consolidated by the Commission. This resulted in a review of data from 78 investigations.

Our analysis found an overall error rate of 15.4% of the data examined. The fields that contained the highest error rates were generally related to inactive dates of parties, inactive dates for unfair acts, and inactive dates for intellectual property types. One possible explanation is that there are several different dates associated with each inactive or termination event, including notice issue date, notice service date, and voting sheet date.

A high error rate means that users cannot confidently make informed decisions based on Commission data. It may lead to Commission customers relying on conclusions drawn from inaccurate data. The need for accurate and complete data is especially important now because the Commission is in the process of creating a new data management system, IDS, that will include data already contained in the 337Info System. The Commission should ensure that quality data is migrated into the new data management system before making it available for widespread use. It is important that the Commission performs a quality review of all data in the 337Info System, not

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just the data fields and investigations that were in the scope of this audit. Although the Commission would need to review a large amount of data to ensure overall quality, the Commission should accomplish this task before it is used by external stakeholders. Without these additional quality checks, the Commission will continue to provide inaccurate and incomplete data to its customers, which could affect the integrity of the Commission and cause a loss of confidence in the Commission's systems and data.

Recommendation 1: The Commission determine acceptable accuracy benchmarks to provide quality Section 337 Investigation data to users.

Recommendation 2: The Commission set data management goals to track progress in reaching acceptable accuracy benchmarks.

Recommendation 3: The Commission document roles and responsibilities for Section 337 investigation data.

Recommendation 4: The Commission establish a quality review for historical Section 337 investigation data prior to providing this data to the public through IDS.

Recommendation 5: The Commission establish automated controls that include user permissions and the ability to monitor changes to Section 337 investigation data.

Recommendation 6: The Commission implement technology controls to minimize errors when entering Section 337 investigation data into information systems.

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Management Comments and Our Analysis

On February 19, 2020, Chairman David S. Johanson provided management comments on the draft report. He agreed with the findings in the audit and stated that the Commission will make management decisions to address the six recommendations in the report.

Objective, Scope, and Methodology

Objective: Does the 337Info System provide quality data to users?

Scope:

- Terminated violation Section 337 investigations for the two-year period from July 1, 2017, to June 30, 2019. Investigations with ancillaries were excluded. This resulted in 78 investigations being reviewed.
- Data fields were selected based on the ability to reconcile with the official record that is maintained in the Commission's Electronic Document Information System. Some fields were excluded to reduce duplicative counting of both errors and correct inputs.
- We reviewed 38 data fields from the 337Info System.

Methodology:

1. Interview Commission staff.
2. Understand the data entry roles of each office.
3. Understand user permission and other controls related to data input and entry.
4. Obtain policies and procedures related to data entry and review.
5. Analyze data entry processes and procedures.
6. Analyze data review processes and procedures.
7. Understand Commission data management plans and efforts.
8. Reconcile data from source EDIS documents to external facing 337Info System.
9. Some data fields that could be derived from multiple data points were considered one data field for purposes of reconciling the data to source EDIS documents.

GAGAS Statement: We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards (GAGAS) during the period of June 2019 through January 2020. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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Appendix A: Error Rate by Field

Field (38)	Errors	Number of Fields Applicable	Error Rate
Title	2	78	2.6%
Type of Investigation	1	78	1.3%
Docket #	0	78	0.0%
Investigation Status	2	78	2.6%
Complainants	2	78	2.6%
Complainants Active Dates	12	78	15.4%
Complainants Inactive Dates	29	78	37.2%
Complainants Counsel	8	76	10.5%
Respondents	3	78	3.8%
Respondents Active Date	17	78	21.8%
Respondents Inactive Dates	37	78	47.4%
Respondents Counsel	8	73	11.0%
ALJ	1	76	1.3%
Date Complaint Filed	2	78	2.6%
Date of Institution	2	76	2.6%
Markman Begins	1	26	3.8%
Markman Ends	2	26	7.7%
Evidentiary Scheduled Start	5	68	8.7%
Evidentiary Scheduled End	4	68	7.2%
Evidentiary Start	1	18	5.6%
Evidentiary End	2	18	11.1%
Target Date	4	73	5.5%
Final ID Due Date	7	72	9.7%
Final ID Issued Date	2	18	11.1%
Non Final ID Issued Date	16	58	27.6%
Final Determination No Violation	7	10	70.0%
Final Determination Violation	5	10	50.0%
Termination Date	23	78	29.5%
Unfair Act Alleged	2	78	2.6%

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Unfair Act Alleged Active Date	15	78	19.2%
Unfair Act Alleged Inactive Date	57	78	73.1%
Patent Number	2	70	2.9%
Patent Number Active Date	9	70	12.9%
Patent Number Inactive Date	31	70	44.3%
Copyright	1	1	100.0%
Trademark	3	4	75.0%
Active Date	3	4	75.0%
Inactive Date	4	4	100.0%
TOTALS	332	2159	15.4%

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Appendix B: Management Comments



UNITED STATES INTERNATIONAL TRADE COMMISSION

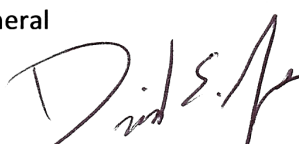
WASHINGTON, DC 20436

CO83-SS-004

February 19, 2020

MEMORANDUM

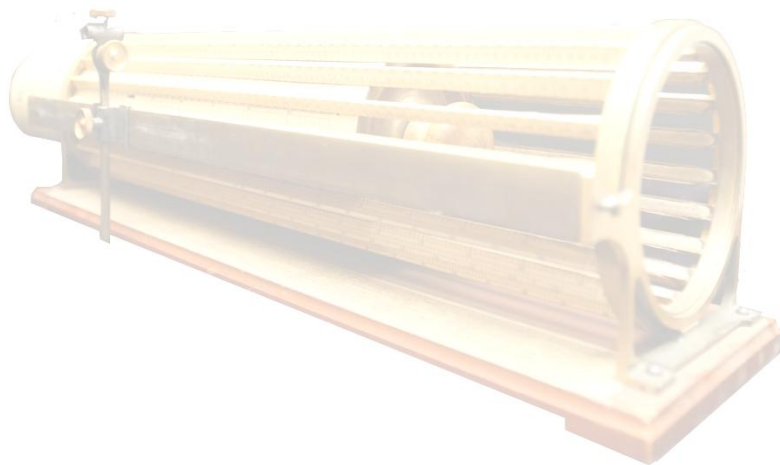
TO: Philip M. Heneghan, Inspector General

FROM: David S. Johanson, Chairman  19 Feb 2020

SUBJECT: Response to Draft Report – Audit of Data in 337Info System

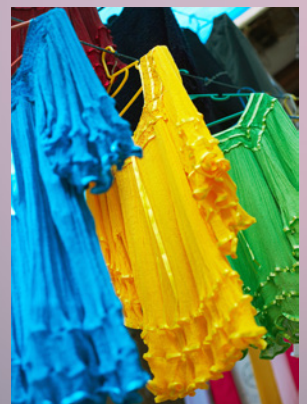
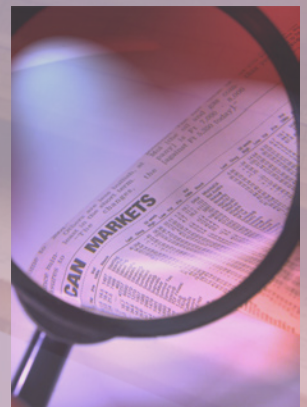
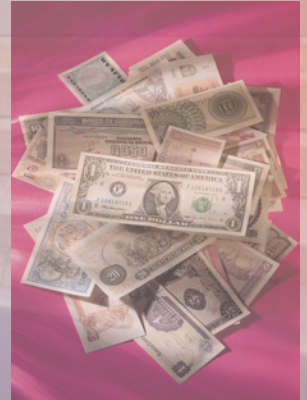
Thank you for the opportunity to review and provide comments to the draft report -- Audit of Data in 337Info System.

We agree with the audit finding that the Commission did not have an effective process to provide quality data through the 337Info System. The Commission will develop management decisions to address the six recommendations in the report.



“Thacher’s Calculating Instrument” developed by Edwin Thacher in the late 1870s. It is a cylindrical, rotating slide rule able to quickly perform complex mathematical calculations involving roots and powers quickly. The instrument was used by architects, engineers, and actuaries as a measuring device.

To Promote and Preserve the Efficiency, Effectiveness, and Integrity of the U.S. International Trade Commission



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