

REVIEW OF DOS CONTROLS OVER THE SHARP SYSTEM

Audit Report No. 00-017

May 22, 2000




OFFICE OF AUDITS

OFFICE OF INSPECTOR GENERAL

DATE: May 22, 2000

MEMORANDUM TO: James L. Sexton, Director
Division of Supervision

FROM: 
David H. Loewenstein
Assistant Inspector General

SUBJECT: *Review of DOS Controls over the SHARP System*
(Audit Report No. 00-017)

The Federal Deposit Insurance Corporation's (FDIC) Office of Inspector General (OIG) has completed its review of the Division of Supervision's (DOS) controls over the reliability of the Scheduling, Hours, And Reporting Package (SHARP) system. We have also reviewed the Division of Compliance and Consumer Affairs' (DCA) controls over SHARP, which are addressed in a separate report to DCA.

BACKGROUND

The SHARP system is a computerized scheduling, hours, and reporting tracking system. It has been developed for DOS and DCA to standardize the process of collecting and reporting hours utilization information for examiners.

DOS employees are responsible for recording their own hours in SHARP. Within the system, hours are allocated by activity codes according to the type of task performed. Such tasks include, for example, bank examinations, training, and travel. For bank examinations, hours can be allocated by specific examinations and by various kinds of examination activities. In addition, hours that examiners work inside a bank can be differentiated from those worked outside the bank. The system also tracks hours by office codes, which allows for hours to be reported by office, including detail assignments. Once the employees have entered their hours on their computer, they upload the data to a central database.

DOS management uses SHARP information for examination management and budget purposes, analyzing and tracking examination time spent, and projecting future staffing needs.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives were to determine whether the SHARP system as used by DOS (1) has proper internal controls in place and (2) generates accurate and reliable information. We reviewed

SHARP data for the months of May and September 1999 and DOS Regional Office Reviews from January 1998 through June 1999.

We performed fieldwork in the DOS Washington, D.C., headquarters office. We focused our review on the internal controls in place and the system's ability to generate accurate and reliable data. We obtained and reviewed the SHARP User Manual and DOS Regional Office Reviews. We judgmentally selected SHARP hours reports for May 1999 and September 1999 for review. We interviewed the DOS SHARP system liaison, DOS management and staff, and the Division of Information Resources Management (DIRM) project manager for SHARP. The review was conducted in accordance with generally accepted government auditing standards. Our review was performed from October 1999 through February 2000.

RESULTS OF REVIEW

Overall, the SHARP system generally meets the needs of DOS examiners and management. DOS regional office reviews check the reliability of the SHARP data on a periodic basis. However, during our review we noted some controls that should be strengthened over the data in the SHARP system to ensure data integrity and reliability. These controls relate to the input and review of employee hours and the prevention of data alteration.

We attempted to test the system's data integrity to determine whether the system generates accurate and reliable data. However, due to the internal control weaknesses noted above, we decided to postpone further testing until a future audit is conducted, once the internal controls have been strengthened. Our results are discussed in more detail below.

INPUT AND REVIEW OF EMPLOYEE HOURS

According to the SHARP User Manual, all examiners should enter their record of hours worked into the SHARP system "on a daily basis if possible. In this way, the data will have the highest degree of accuracy. If hours cannot be entered daily, they should be entered as often as possible."

During its regional office reviews in 1998, DOS headquarters identified problems with the SHARP data in two regions. In both regions, DOS identified employees who had entered time in excess of or under the required 80 hours per pay period. In one region, six employees had been identified as not entering data in the SHARP system at all for the weeks reviewed.

In 1999, DOS headquarters identified problems related to SHARP data in two other regional office reviews. One common problem identified was that users were not consistently reporting hours and accounting codes. Also, DOS headquarters staff noted discrepancies between employee hours entered in the SHARP system and hours entered for time and attendance reporting.

Timely and accurate data entry is an important practice when tracking time charges to specific examinations. At the end of an examination, DOS generates a report from the SHARP system, the Page A Report, which details the hours by examiner, grade, activity, and division. In addition,

examination hours spent inside the bank and outside the bank are identified separately. DOS uses this information to establish benchmarks for subsequent examinations and to plan for resource levels needed to complete its workload. If the Page A Report is generated and examiners either have not entered their time charges into SHARP or have entered them incorrectly, the Page A Report will not accurately reflect resources devoted to the examination.

Through interviews with DOS management in Washington, we also identified that examiners-in-charge, field office supervisors, and regional managers are not required to review or approve examiner time charges on a regular basis. We were told that examiners-in-charge are conscious of hours charged to their examinations (as the hours appear on the Page A Report) and that they would be alert to any major discrepancies that occurred.

A review of the Page A Report alone does not provide assurance that all the hours entered in SHARP are accurate, because the Page A Report captures data associated with examination activities only. It does not identify hours for non-examination activities, such as annual leave and training. Therefore, we believe that reviewing the Page A Report does not provide the assurance needed to rely on the data in the SHARP system.

PREVENTION OF DATA ALTERATION

During our review we found that employees are able to change their hours in the SHARP database. The ability to alter time charges raises concerns over the reliability of data in management reports.

If changes are made to the SHARP data, the SHARP system does not retain the previous date(s) when hours were entered into the system; it also does not track the sources of subsequent data changes. Consequently, if changes are made several times, there is no audit trail to determine when the previous changes were made. The SHARP system does include a date when data is entered, but the date changes each time an employee corrects a data record. Consequently, the date retained in the system is the last date when an employee updated the record.

We reviewed a sample of time charge records for employees in one DOS regional office for May 1999. The SHARP report showed that users entered the system from August through December 1999 and accessed May 1999 time charges for 6 out of 269 employees. The system does not track whether the time charges for the 6 employees had been altered or not. However, we believe it should be rare for time charges to be accessed 3 to 7 months after the pay period end.

CONCLUSION AND RECOMMENDATIONS

We believe that DOS needs to strengthen its controls to provide a higher level of reliability for the SHARP data. We believe that improved controls would not require extensive DOS resources, and that those controls would enhance the reliability of management reports. Because SHARP is relied upon to track DOS's workload and to help plan for future resources, we believe DOS should take action to address the control weaknesses we identified.

Accordingly, to increase the reliability of management reports generated by the SHARP system, we recommend that the Director, DOS:

- (1) Instruct examiners to complete their time charges on a daily basis, or as frequently as possible, as required by the SHARP User Manual;
- (2) Require examiners-in-charge and/or field office supervisors to review time charges on a regular basis for accuracy;
- (3) Pursue with DIRM the possibility of changing the SHARP system to lock in time charges after a certain period of time, or some other method of limiting the ability to change data; and
- (4) Pursue with DIRM the possibility of retaining the original date that data is entered into SHARP in addition to the currently maintained date of last entry or access.

CORPORATION COMMENTS AND OIG EVALUATION

On April 14, 2000, the Director, DOS, provided a written response to the draft report. The response is presented in Appendix I of this report.

Management agreed with all of the recommendations. Corrective actions will be implemented by the end of the second quarter of 2000 for recommendation 1 and by the end of the third quarter of 2000 for recommendations 2 and 3. With regards to recommendation 4, DOS has contacted DIRM to discuss financially viable options to retain the original date as well as retaining the most recent date data is entered in SHARP. DOS management stated that “creating a full audit trail would be prohibitively costly since it would require a major redesign of the software.” DOS also stated in its letter that “DIRM will continue to look at alternative methods of either capturing and retaining the original date or other methods of better tracking user changes. ... This issue can be re-addressed at subsequent budget periods.”

The Corporation’s response provided us with the requisite elements of a management decision for all recommendations. The Director, DOS, agreed to take action on our recommendations. We concur with and accept management’s response to the recommendations.



April 14, 2000

TO: David H. Loewenstein, Assistant Inspector General
OIG Office of Audits

FROM: James L. Sexton, Director
Division of Supervision

SUBJECT: Response to Draft Report Entitled Review of DOS Controls over the SHARP System

Thank you for the opportunity to comment on your draft report *Review of DOS Controls over the SHARP System*. As requested in your memorandum dated March 20, 2000, we are presenting our response to the OIG's Office of Audits recommendations contained in the aforementioned report both in hard copy and electronic format.

Recommendation 1 - Instruct examiners to complete their time charges on a daily basis, or as frequently as possible, as required by the SHARP User Manual.

DOS believes it is unnecessary to require examiners to enter their hours information into SHARP on a daily basis. Activities must be reported on a day-by-day basis, but not necessarily entered every day. The examiners travel frequently and it is often not convenient for them to enter SHARP data daily. While the more frequent the data entry, the less likely it is that activities will be forgotten or coded incorrectly, daily entry is often not feasible or practical. Therefore, the SHARP User Manual is being revised to instruct staff to enter hours as often as possible, but not less than every two weeks. The changes to the User Manual are currently undergoing the approval process. Once approved, the electronic version of the Manual will be updated on the SHARP Intranet Web page. We expect this process to be finished by the end of second quarter, 2000. DOS will notify SHARP users, as well as the OIG, once the electronic Manual is updated.

Recommendation 2 - Require examiners-in-charge and/or field office supervisors to review time charges on a regular basis for accuracy.

We agree with the OIG that the data entered into SHARP needs to be reviewed for accuracy. As part of the SHARP User Manual update, statements will be added that instruct examiners-in-charge to review hours data on the Page A Workpaper for reasonableness. As stated above, DOS will notify the

OIG when the electronic Manual is updated.

In the next SHARP guidance memo DOS develops, a statement will be included that expresses the necessity and importance of data integrity, and that time charges are to be reviewed by the Field Office Supervisor and/or others for accuracy. Field Office audit procedures will address the need for SHARP review. DOS will include the OIG on the distribution list of the next guidance memo, which is expected to be developed and distributed by the end of the third quarter, 2000.

Additional guidance will be given to the Regional Directors stressing the importance of reviewing the accuracy of the SHARP data. DOS will include the OIG on the distribution list of this memo.

Recommendation 3 - Pursue with DIRM the possibility of changing the SHARP system to lock in time charges after a certain period of time, or some other method of limiting the ability to change data.

The OIG draft report states that the records sampled from one DOS regional office showed six employees had accessed their time charges that were three or more months old. However, DOS doesn't believe that employees' altering their time charges is necessarily a negative occurrence. There were numerous reviews of SHARP data by Washington and regional staff during 1999 and when errors or questions are found, the involved user was notified and requested to review and change the data if needed. Many of these reviews were conducted at quarter- and year-end resulting in extended periods before the user actually made the change. DOS expected employees to review their hours charged throughout 1999 and to make corrections where necessary so that hours data could be reported accurately.

The SHARP system does not currently have an audit trail system that tracks changes made to the data. DCA and DOS met with DIRM to discuss financially viable options for locking in data and limiting the ability to change data. The software will be revised to limit the length of time that a user can go back to and make changes or entries. Users will now be allowed to make entries and changes for the 180 day period preceding the current date. This timeframe will allow review of uploaded data by audit and management groups, who can then request that users make necessary corrections. Any changes to earlier dates will have to go through the SHARP Administrator and be documented. If a user attempts to upload a change to an earlier date, a warning message will be provided and the data captured in an exception report. This exception report can then be provided to the SHARP Administrator, with explanation, for processing.

DOS will notify SHARP users, as well as the OIG, via memorandum once the limitation on the SHARP system is in place. DIRM anticipates that this change can be made to the software by the end of third quarter, 2000.

Recommendation 4 - Pursue with DIRM the possibility of retaining the original date that data are entered into SHARP in addition to the currently maintained date of last entry or access.

DCA and DOS met with DIRM to discuss financially viable options to retain the original date data are entered as well as the most recent date data are entered into SHARP. A cost analysis indicated that creating a full audit trail would be prohibitively costly since it would require a major redesign of the

software. When a change is made to an entry, the entire record for that date is replaced with the revised record and retaining the original date would require creating a temporary record to store the date, then adding it to the new record. This would also slow the process of uploading data to the server. DIRM will continue to look at alternative methods of either capturing and retaining the original date or other methods of better tracking user changes. The addition of the 180 day entry limitation and increased review of the data should help in reducing concerns about changes to the data. This issue can be re-addressed at subsequent budget periods, however at this point it would be difficult to justify the expenditure required to implement this change.

If you have any questions, please contact Deborah Boone, (202) 898-6954.

MANAGEMENT RESPONSES TO RECOMMENDATIONS

The Inspector General Act of 1978, as amended, requires the OIG to report the status of management decisions on its recommendations in its semiannual reports to the Congress. To consider FDIC's responses as management decisions in accordance with the act and related guidance, several conditions are necessary. First, the response must describe for each recommendation

- the specific corrective actions already taken, if applicable;
- corrective actions to be taken together with the expected completion dates for their implementation; and
- documentation that will confirm completion of corrective actions.

If any recommendation identifies specific monetary benefits, FDIC management must state the amount agreed or disagreed with and the reasons for any disagreement. In the case of questioned costs, the amount FDIC plans to disallow must be included in management's response.

If management does not agree that a recommendation should be implemented, it must describe why the recommendation is not considered valid.

Second, the OIG must determine that management's descriptions of (1) the course of action already taken or proposed and (2) the documentation confirming completion of corrective actions are responsive to its recommendations.

This table presents the management responses that have been made on recommendations in our report and the status of management decisions. The information for management decisions is based on management's written response to our report.

Rec. Number	Corrective Action: Taken or Planned/Status	Expected Completion Date	Documentation That Will Confirm Final Action	Monetary Benefits	Management Decision: Yes or No
1	The SHARP User Manual is being revised to instruct staff to enter hours as often as possible, but at least every two weeks.	Quarter 2, 2000	SHARP User Manual SHARP Intranet Web Page	Not Quantifiable	Yes
2	DOS has updated the Sharp User Manual with instructions to examiners-in-charge to review hours on the Page A Workpaper for reasonableness. In the next SHARP guidance memo, a statement will be included that expresses the necessity and importance that time charges are reviewed by the Field Office Supervisor for accuracy.	Quarter 3, 2000	Copy of guidance memo provided to all staff	Not Quantifiable	Yes
3	DIRM will revise software to limit the length of time that a user can go back to make changes or entries.	Quarter 3, 2000	Copy of SHARP limitation memo to all staff	Not Quantifiable	Yes
4	DOS and DCA met with DIRM to discuss financially viable options to retain the original date data are entered as well as the most recent date data are entered into SHARP and determined that creating a full audit trail would be prohibitively costly. DIRM will continue to look at alternative methods of either capturing and retaining the original date or other methods of better tracking user changes.	N/A	Management's response to the draft report dated 4/14/00	Not Quantifiable	Yes