

Civilian Pay (DCPS) Postpay Review FY2013 Sampling Plan

Background

The Defense Finance & Accounting Service (DFAS), Enterprise Solutions & Standards (ESS), Postpay Review & Analysis (PR&A) directorate located in Indianapolis, IN, serves as the DFAS office of primary responsibility for agency reporting and compliance with the Improper Payments Elimination and Recovery Act of 2010, IPERA, (Pub. L. 111-204).

The PR&A team perform monthly postpay reviews of statistical random samples of civilian pay accounts paid by the Defense Civilian Pay System (DCPS). The purpose of the sampling plan is to provide population estimates and applicable confidence intervals, within specified sampling probability (95%) and precision levels (+/-2.5%), of the percentage of civilian pay accounts in error at the service component, pay database and DFAS servicing site level. In addition, the sampling plan serves as a means to collect data on sampled accounts regarding the accuracy of gross pay and dollar value of overpayments and underpayments as a percentage of gross pay to satisfy improper payments reporting requirements per the IPERA. Root causes of errors by type and category (system or reporting) are recorded and used for preparing reports and balanced scorecard metrics for applicable civilian payroll activities and the Office of the Under Secretary of Defense (Comptroller).

The PR&A Standard Operating Procedures (SOP) contains guidelines for the performance of the civilian postpay reviews. Additional guidelines for random reviews in support of the improper payments reporting can be found in OMB guidance to the IPERA.

Population and Sample Frame

The population of DoD civilian pay is divided among seven databases paid by the Defense Civilian Pay System (DCPS). The databases reflect customer base (service component) as well as servicing DFAS site. The DoD Agencies represent the sum of all serviced agencies plus any other DoD miscellaneous organizations not represented at the service component level within other population groups. The following table represents the total annual and average monthly accounts maintained for FY12.

DoD Civilian Pay		
Component (Database)	Annual Accounts Maintained	Average Monthly Accounts Maintained
Army CONUS (OMA)	3,411,040	284,253
Air Force CONUS (CP1)	2,139,874	178,323
Navy/USMC & Shipyards (ZGT & ZL0)	2,358,571	196,548
DoD Agencies/Other (ZKA)	1,232,194	102,683
Overseas (ZFA & ZFR)	345,644	28,804
Total DoD	9,487,323	790,610

DFAS also provides civilian pay support to non-DoD agencies. The PR&A's priority for IPERA reporting is with the DoD agencies; however, random postpay reviews of pay accounts from these non-DoD agencies may be performed periodically.

Sample Design

The sample design is a simple random sample (attribute) with the purpose of estimating the percentage of civilian pay accounts in error. The sample also provides sample statistics on the dollar value of improper over and under payments and root cause of error for use in annual IPERA reporting.

The sampling unit is defined as a pay account from the DoD agency databases paid through DCPS.

Sample Size Calculation

The sample size is calculated for 95% confidence and +/-2.5% precision. Per guidance contained in the OMB Circular A-123, Appendix C, the required sample size for each population is based on a higher projected error rate than actual results from prior fiscal years. The FY13 sample size is calculated based on the conservative rate of 15% although the actual FY12 and historical error rates were two percent or less. The selection of the higher rate is due to the risk of the large dollar amount of annual outlays expended by the Department for civilian pay.

The DCPS accounts maintained for FY12 are used to calculate the annual sample sizes for FY13. Although the sample size is calculated for an annual plan, the PR&A conducts the postpay reviews on a monthly basis. The simple random sample size for each component is approximately 785 (65 per month per component) to satisfy annual estimates for IPERA reporting.

DoD Civilian Pay Sample Size		
Component (Database)	Monthly	Annual
Army CONUS (OMA)	65	785
Air Force CONUS (CP1)	65	785
Navy/USMC & Shipyards (ZGT & ZL0)	65	785
DoD Agencies/Other (ZKA)	65	785
Overseas (ZFA & ZFR)	65	785
Total DoD	325	3,925

Sample Selection

The Defense Manpower Data Center (DMDC) West, Monterey, CA, selects the monthly sample of pay accounts for random review via the Random Number Generator (RNG) from the DCPS databases. Each month, the PR&A provides the DMDC-West with random seed numbers to use with the RNG to ensure randomness of selection and minimize repetition of sampled accounts from one month to the next.

Treatment of Missing Records

It is unlikely that a sampled pay account would not be available for review (i.e., missing or non-existent pay account). However, if this were to occur, the appropriate DFAS civilian pay servicing activity would be notified and research initiated to determine the nature of the missing or non-existent record.

The impact of missing records (no data) influences the precision of the sample statistic as an estimator of the population proportion of records in error, dollar value of over and under payments and settlement dollar value of the overall sample. As such, bias can become a factor in the sample statistic as a population estimator. There are a number of methods available to address missing records, but PR&A will determine the appropriate approach to address the missing records based on the circumstances surrounding number and type of missing records.

Completing the Target Sample

It is imperative that examiners complete the target monthly sample for each component, as assigned, even if this means allotting additional, yet reasonable, time for completion of a component's monthly sample. For reporting purposes, any given component monthly sample that is not complete by the given report cutoff date will be carried forward to the next audit month's report. The civilian pay postpay review results support several monthly metrics, and therefore, the cut off dates for reporting are tied to balanced scorecard deadlines.

Civilian Pay Accounts with Errors

The applicable servicing DFAS civilian pay office is notified of any randomly reviewed record with a monetary error with an explanation of the reason for the error. Errors are classified into two general categories: Systems or Reporting. Systems errors arise when the gross pay is inaccurate due to miscalculation of an entitlement or deduction by the automated pay system (DCPS). Reporting errors occur when an incorrect entitlement, deduction rate or amount was provided by the component and are often attributed to timekeeping or personnel action errors. The PR&A requests confirmation and validation of system errors within 5 days of notification and 45 days of notification for reporting errors. Failure of a reply on either type of notice results in the account considered in error as initially discovered and forwarded to the activity. The PR&A annually reconciles accounts in error to determine if the original gross pay error was in fact corrected and the member's pay is accurate.

Summary Reports

Monthly reports are prepared for various activity managers and interested senior officials on results of the random reviews. The volume, dollar value of over and under payments, and root cause of errors identified in the samples are provided along with estimated improper payment total amounts and improper payment rates (combined estimates of overpayment and underpayment dollars divided by the gross outlays).

Statistics in support of the IPERA are collected and analyzed on a monthly basis, to include interim population estimates, and reported via an OSD metric. Statistics from these reviews are also used for internal DFAS Balance Scorecard, productivity reports, and periodic updates to OSD and OMB. Annual

reports in support of the IPERA requirements are provided to OSD for use in the Department's annual Agency Financial Report (AFR) and IPERA Survey. The annual AFR improper payment appendix consists of the annual population gross pay, the estimated dollar value of overpayments, the estimated dollar value of underpayments, the total estimated improper payments (sum of over and underpayment total estimated dollars), and the improper payment percentage (total estimated improper payments to total gross pay). The report also includes the root causes of improper payments identified, actions planned or taken to correct the causes, completion date of the actions, amount of improper payments recovered, internal controls and infrastructure in place to reduce improper payments, and steps the agency took to ensure management accountability.

References for Statistical Sampling Methodology and IPERA Implementation Guidance

Cochran, William G, *Sampling Techniques* (3rd Ed.), New York: John Wiley & Sons, 1977.

Levy, Paul S and Lemeshow, Stanley, *Sampling of Populations Methods and Applications* (3rd Ed.), New York: John Wiley & Sons, 1999.

Office of Management and Budget (OMB) Memo M-11-16, "Issuance of Revised Parts I and II to Appendix C of OMB Circular A-123, of April 14, 2011.