

“Personnel Security Investigation Projection for Industry Survey”
OMB 0704-0417
Supporting Statement – Part B
Collections of Information Employing Statistical Methods

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used.

Executive Order (EO) 12829, “National Industrial Security Program (NISP)”, dated January 7, 1993, stipulates that the Secretary of Defense shall serve as the Executive Agent for inspecting and monitoring the contractors, licensees, and grantees who require or will require access, to or who store or will store classified information; and for determining the eligibility for access to classified information of contractors, licensees, and grantees and their respective employees. EO 12829 also authorizes the Executive Agent to issue, after consultation with affected agencies, standard forms that will promote the implementation of the NISP.

This collection instrument is used to survey the entire population of active, cleared industry facilities which are covered under the NISP. This is a population of approximately 12,000 facilities. The population of facilities wavers within +/- 5% of 12,000 as new facilities enter the NISP and facilities leave by terminating their agreement, shutting down, merging with other companies, etc.

Each facility designates a Facility Security Officer (FSO) who serves as the primary point of contact for this data collection. The FSO or their designated alternate representative is the recipient and respondent of the survey.

Expected response rate of the data collection is above 80%. As some facilities have significantly larger cleared populations than others, the invitee response rate often results in an even larger percentage of the total cleared population being represented, with cleared population representation being historically approximately 10% higher than the facility response rate. The below chart displays this as well as the successful increase in response rate over the recent deployments.

	Spring 2008 Survey	Fall 2007 Survey	Fall 2006 Survey
Facility Participation Rate	83%	70%	51%
Cleared Industry Population Represented	92%	83%	61%

2. Describe the procedures for the collection of information including:

Degree of accuracy needed for the purpose described in the justification: The results of this data collection's projections must be within +/- 5% of actual data for the fiscal year. In Fiscal Year 2007, actual case submissions were 103.9% of projections provided by the FY07 survey. In FY08, actual case submissions were 97.1% of projections from the FY08 survey. These numbers are consistently within the 5% variance goal.

Any use of periodic (less frequent than annual) data collection cycles to reduce burden: The volatility of the industrial field with classified contract workload based on global factors and the high-priority of the most to-date accuracy possible for clearance funding and investigator personnel staffing level establishment, less periodic data collection is not a viable option to meet required DSS and government goals.

Statistical Methodology/Estimation Procedure: As DSS surveys the entire field of active, cleared facilities there is no up-front statistical methodology or sampling applied to the data collection procedure. Following data collection completion, DSS cleans and analyzes data with a high level overview of the process as follows:

METHOD OF ANALYSIS / DATA ACCURACY FOR INDUSTRY PSI SURVEY

Data Integrity

The survey allowed submitting Facility Security Officers to enter values with validation wherever applicable, thus up-front removing many input errors. Some cells by nature are without validation however, permitting typographical errors to become part of their response. DSS developed multiple routines to (1) parse and clean the facility identifier list into workable data; (2) ensure that all facility identifiers are accurately represented (for example, leading capital Os changed to zero and those represented in numeric form were corrected to alpha-numeric); (3) all projections are corrected to be numeric.

Validity

All facility identifiers are checked against a Master list provided from the Industrial Security Facility Database. Duplicate identifiers are removed.

Each facility responding to the survey has the opportunity to submit a consolidated report for multiple, associated facilities. In this case, the submitting facility would provide a list of facility identifiers included in their response. Some facilities included in the consolidated list were also submitted individually. Automated routines were developed to ensure that each facility is represented only once in the final survey results.

Imputation

Since all facilities did not respond to the survey, values must be estimated for their missing data. The method applied in this analysis to impute these data was the MEAN kNN. This is the average of the k nearest neighbors to the imputed cage code. Nearness was measured as the absolute value of the difference of cleared employees; k was set as 12. This means that if imputation is required for a cage code with 100 TS workforce, it is imputed as the arithmetic mean of the requirements reported by the twelve cage codes having a TS workforce nearest to 100. This method results in estimates that are consistent with facilities of similar size.

Correction for Over-estimation

Historically, when compared to actual submissions, survey submissions over-estimate the requirement. Some reasons offered for this practice are that companies pad their estimates to ensure that funding for investigations will be available even after funding cuts. Another is that companies expecting to win contract awards increase their estimates to account for that need; however several companies may be vying for the same award. In any case, corrections must be made for over-estimation. Regression was applied to past projected versus actual submissions by case type. The overall FY estimates were adjusted using the regression equation for each case type.

There were also gross overestimations of requirements from more than 1,000 small facilities. With the unprecedented number of respondents to the most recent survey, there are many facilities participating for the first time and their lack of familiarity with the collection instrument caused confusion. To correct for these mis-estimations, an algorithm was applied to cap the requirement based on the facility's cleared population at both the Secret and Top Secret level.

3. Describe methods to maximize response rates and to deal with issues of non-response.

(ATTACHMENTS 5-15)

Early Notification: The DSS Clearance Oversight Office in cooperation with the DSS Industrial Security Program instituted an unprecedented amount of advertisement for the FY09 survey. Survey information was posted to multiple websites, advertised via email, covered in conferences, discussed with Facility Security Officers by their assigned Industrial Security Representative, and all facilities were sent a survey preview ahead of time. They were allowed to view what would be asked of them, the survey format, and were given the opportunity to provide any questions, comments, or suggestions for improvement. Using this feedback from the end-user DSS was able to ensure an efficient survey deployment tailored to the needs of industry.

Corporate-wide Submissions via a Single POC: DSS allowed large corporations to submit their entire security projections for all covered facilities within their security program umbrella from one Corporate Headquarters Facility Security Officer. By allowing larger corporations which might have as many as 215 active, cleared facilities to submit one consolidated survey covering all facilities, the DSS survey minimized any confusion and double-counting caused by multiple same-company submissions. It also ensured higher accuracy by collecting projections from an official with an executive overview of the security needs of the entire corporation.

Dealing with Non-Respondents: To deal with non-response updates were sent via email to users who had not completed their survey starting one week after survey deployment and recurring every week until survey close. Three days from survey deploy date a final reminder was sent out to the remaining handful of non-respondents. DSS survey team staffed an email-based help center to assist any users with issues. Additionally, the DSS Call Center provided phone-based support to any users experiencing problems with completing their form.

4. Describe any tests of procedures or methods to be undertaken.

(ATTACHMENTS 1-4)

Internally, Defense Security Service performed a robust testing of the data collection tool using 10 internal employees with varying degrees of knowledge on the subject matter. This allowed a wide-range of user perspectives on the form. Testers were encouraged to provide any feedback and all feedback was reviewed and often implemented into the design.

Externally, DSS coordinated with eight cleared contractor volunteers to serve as testers for the usability, readability, clarity and sequence of the questions for the survey of personnel security investigation (PSI) for cleared contractor facilities. For the most recent data collection, testers received one test survey in December 2007 and then two in January 2008. By developing the survey process side-by-side with these facilities the data collection was ensured to meet DSS needs and maintain maximum clarity and ease-of-use for the industrial community.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Valerie Heil	DSS PSC ISP, Liaison	703-325-6050
Ryan Deloney	DSS COO, Project Analyst	703-325-1317
Helmut Hawkins	DSS COO, Research Analyst	703-325-6167
Roger Dietrich	DSS COO, Research Analyst	703-325-6147