SUPPORTING STATEMENT – PART B

B. <u>COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS</u>

1. <u>Description of the Activity</u>

The goal of this three-year study is to improve NGA products, content, and service by increasing knowledge and understanding of Geospatial Intelligence (GEOINT) customers' needs and experiences. Respondents to the proposed customer experience surveys are employees of the Federal government, who use NGA GEOINT to support their respective missions.

The technical approach used to understand customer experience is based on scientific principles and driven by the need for evidence-based decision-making. Research objectives for any customer experience study are derived from the systematic analysis of organizational strategy. Research questions are derived from operational objectives that mark progress toward achieving strategic goals. Based on this foundation, customer experience is explored through correlation models that are open to rigorous statistical testing and analysis. Quantitative and qualitative data is gathered through surveys, semi-structured interview forms, focus groups, and feedback forms. Models are refined to fit the resulting data using inferential tests. Significant correlations and strong construct validity provide organizational leadership and other decision-makers confidence for data-driven decision making. This will ensure maximum improvement on customer experience and progress toward mission accomplishment.

Initially the sample population will be a census sample with no a prior stratification. Post hoc stratification (based on authentication data) will be according to IC or DoD contract duty membership. Weighting is not possible without clear population parameters, which are not available from the intelligence community, our primary customer segment. Because of that, we will not be using weights in sampling.

2017 Inquiries	Number of	Time to	Occurrences	Total Time
	Respondents	Complete	per Year	Burden in
		Inquiry		Hours
Annual Survey	20,000	15	1	5,000
Targeted	1,500	10	4	1,000
Surveys				
Interviews	50	30	2	50
Focus Groups	45	90	2	135

Anticipated sample sizes, inquiry types, frequency, and time to completion are as follows:

2018 Inquiries	Number of	Time to	Occurrences	Total Time
	Respondents	Complete	per Year	Burden in

		Inquiry		Hours
Annual Survey	20,000	15	1	5,000
Targeted	1,500	10	6	1,500
Surveys				
Interviews	50	30	3	75
Focus Groups	45	90	3	202.5

2019 Inquiries	Number of Respondents	Time to Complete	Occurrences per Year	Total Time Burden in
		Inquiry		Hours
Annual Survey	20,000	15	1	5,000
Targeted	1,500	10	8	2,000
Surveys				
Interviews	50	30	4	100
Focus Groups	45	90	4	270

Based on analysis of strategy and engagement with organizational leadership, the following customer experience research plan objectives are listed in rank order of importance.

- 1. Describe the NGA customer experience.
- 2. Evaluate the service quality criteria that drive customer expectations.
- 3. Understand the changing role of NGA in a newly-competitive marketplace.
- 4. Evaluate assured access to and confidence in data, capabilities, and insights.
- 5. Characterize the key attributes of customer centricity for each network domain.
- 6. Determine how forms, frequency, and purpose of communication foster confidence in NGA products and services.
- 7. Describe the customers who work in the open, unclassified world within which NGA must become the premiere geospatial intelligence services provider.
- 8. Determine which tools, methodologies and technologies and what infrastructure best posture analytic modernization in the NGA environment.
- 9. Assess the functionality and effectiveness of shared, cloud-based services
 - 2. Procedures for the Collection of Information

The respondent population for surveys comes from network accessible authentication records. Survey samples will be drawn using a random stratified sampling procedure. Stratification (based on authentication data) will be according to IC or DoD contract duty membership. Respondents will not incur a burden beyond a single survey per year. Consequently, respondents selected from the sampling population during a previous year's surveying will be excluded from surveys for a subsequent year.

3. Maximization of Response Rates, Non-response, and Reliability

Steps taken to maximize response rate include senior NGA leadership sending an email to respondents prior to a survey, administering surveys at times of the year not impacted by holiday and vacation schedules, designing surveys that are brief and use simple and clear language to minimize respondent fatigue. Furthermore, the introductory email to the survey will explain the importance of receiving feedback in order to make the respondent's user experience better.

Nonresponse analysis will be conducted to test for validity. Responders will be compared with the total population and non-responders on demographic characteristics. Furthermore, early responders will be compared with late responders by using late responders as a surrogate for non-responders.

4. Tests of Procedures

It will be verified that resulting data matches expectation and intention. To this end, surveys will be pretested on an appropriate sized sample to ensure clarity of the questions and intended analyses of results. Questions used during interviews and focus groups will also be pretested using nine or fewer respondents from the sample population.

5. Statistical Consultation and Information Analysis

The following individuals were consulted regarding aspects of the study design: Mr. Frederik Licari, WHS, (571) 372-0493; Mr. Ian Armstrong, WHS, (571) 372-7677; Mr. Karl Pabst, WHS, (571) 372-4527; Dr. Paul Rosenfeld, Office of People Analytics, Defense Human Resources Agency, DOD, 571-372-0987, paul.rosenfeld.civ.@mail.mil

The person who will collect and analyze the collected information include:

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