SUPPORTING STATEMENT PART A

TITLE OF INFORMATION COLLECTION: ESDIS Data Systems Annual ACSI User Survey

TYPE OF INFORMATION COLLECTION: NASA data systems use and resulting customer satisfaction.

A. JUSTIFICATION

- 1. Explain the circumstances that make the collection of information necessary. The ESDIS (Earth Science Data and Information System) Data Systems Annual ACSI (American Customer Satisfaction Index) User Survey (herein referred to as the ESDIS US), is an integral instrument of the ESDIS Data System Project. The ACSI survey was initiated 20 years ago to gauge the overall user satisfaction with NASA EOSDIS (i.e., the 12 data centers or DAACs (Distributed Active Archive Center) that comprise the system). Early on NASA HQ confirmed that an annual survey would be sufficient to stay attuned to changes in user needs and desires as well as fulfill metric requirements needed for NASA reporting to OMB and other governmental reporting obligations.
- 2. Indicate how, by whom, and for what purpose the information is to be used. The ESDIS US is provided each year to users from an online (web-based) survey provided by CFI (not an acronym). CFI is a private nongovernment entity contracted by NASA to organize and implement the annual survey and importantly provides a non-biased means for users to remain anonymous to NASA. The results from the survey (a quantitative ACSI score for ESOSDIS and each DAAC) are used to access the overall user satisfaction of the data systems in meeting the needs of our users. Changes in the overall ACSI score, along with comments offered from users, allows ESDIS to modify existing data system components to meet emerging user needs and, importantly, assess the impact of changes ESDIS makes to the system as it evolves through time.
- 3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g. permitting electronic submission of responses, and the basis for the decision for adopting this means of collection.

 The questions used in the survey (and updates to those questions) are created by NASA in consultation with CFI to assure methodological coherence. The agreed set of survey questions are then transferred from a working text document and 'programmed' into a web-based form served through CFI's online web portal. When solicited to participate in the annual survey, users are sent an email from CFI that contains a specific link for their access. All results from the survey are held by CFI and only aggregated results from the tally and analysis of the survey results are shared with NASA. The web-based format of the survey offers many advantages to both NASA and our survey participants, chief among these is the ready access available to all and the ease of collecting and interpreting the web data generated each year.

4. Describe efforts to identify duplication.

The ESDIS US is a unique survey within NASA's SMD (Science Mission Directorate). The ability to gauge user satisfaction with the services to users provided by NASA is seen as an important aspect of the work of ESDIS. Since the inception of the ACSI survey used by ESDIS and ESD (Earth Science Division), other NASA organizations have leveraged our experiences to develop their own user survey. For example, NASA's Planetary Division now successfully runs their own ACSI survey. Simply put, there is no duplication as there are no other sources (NASA or beyond) available to collect this information. Lastly, the annual cadence of data collection is needed to discern trends in user satisfaction. Our users continue to expect an annual survey and take advantage of this means to express their appreciation or dissatisfaction with existing aspects of the system and services offered.

5. If the collection of information impacts small businesses or other small entities (Item 5 of the OMB Form 83-I), describe the methods used to minimize burden.

The annual ESDIS US has no discernable impacts to small business interests as it focuses on users of NASA's data systems and are active, registered users who have opted in to receiving the survey each year.

6. Describe the consequence to federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

As mentioned, the ESDIS US survey is a long established quantitative and qualitative tool used by the Earth Science Data System Program to better understand the overall data user experience. This survey is a critical input to planning for future investments in our NASA data systems and allows the program to show evidence of positive changes made so to increase user satisfaction. Moreover, HQ (via Jennifer Kearns) requests our ACSI score each year as an input into a report of several metrics shared with other federal agencies. Discussions with HQ in past years has reinforced the HQ desire to continue the survey and complete a score each year.

7. Explain any special circumstances that would cause an information collection to be conducted in an exceptional manner:

Given a well exercised and routine schedule, survey instrument, and implementation processes, the ESDIS US would not experience or have need to conduct the survey in any of the special circumstances as noted in this document.

8. Provide the date and page number of publication in the Federal Register for the 60-day and 30-day FNRS, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB.

60-day FRN: 88 FR 23691on 4/18/2023. No comments were received. 30-day FRN: 88 FR 72539 on 10/20/2023.

9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

The ESDIS US is completely voluntary and offers no renumeration in any form for users

who opt in to complete the survey. As noted, NASA ESDIS does cover the implementation costs through a contract with DOI/FCG (Dept of Interior/Federal Consulting Group) and CFI contractors.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

The establishment of the ESDIS US with the partnership of CFI made clear the anonymous and non-biased foundation of the survey. All data and information shared back with NASA cannot be attributed to any person, nor can we discern a person's identity with any of the aggregated data and findings. NASA has no ability to purposely or accidentally share individual user data.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

Questions of a sensitive nature are not found in the ESDIS US information collection.

12. Provide estimates of the hour burden of the collection of information.

RESPONDENT CATEGORY	NUMBER OF RESPONDENTS	ESTIMATED COMPLETION TIME	ANNUAL BURDEN
ESDIS US Survey	~10,000	15 minutes	2,500 hours

13. Provide an estimate of the total annual cost burden to respondents or record keepers resulting from the collection of information.

The ESDIS US does not bestow any cost burden to our respondents beyond the use of their volunteered time (average survey response = 15 minutes).

14. Cost to the Federal Government: Provide estimates of annualized costs to the Federal government.

Currently NASA ESDIS supports the survey work through a contract with the Federal Consulting Group, a subsidiary of the Department of Interior. This contract allows for the funding of the CFI Group who conduct and maintain the survey and its resulting data and analysis. While costs have grown since the early 2000's, the average annual cost for this survey work is $\sim 120 \text{k/year}$. This cost included the annual ESDIS US survey as well as off-cycle and other inhouse surveys we use for other services falling within the ESDIS Project. The cost overall is the labor hours needed for the curation of the survey and the services provided by FCG in coordination between NASA and CFI.

15. Changes in Burden: Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I, if applicable.

At this time there are no foreseen changes in the overall adjustments that need to be made.

16. Publication of Results: For collections of information whose results will be published, outline plans for tabulation and publication.

As mentioned, the results from the annual ESDIS US are shared across NASA stakeholders such as HQ who require the ACSI score at the end (or near to) of the fiscal year. ESDIS shares the survey results generated independently by CFI with each of our NASA data centers (DAACs). NASA allows CFI to post the results for this survey that is used to generate a score for the whole of the Federal Government each year. Regarding the typical timeline for start and completion of the annual ESDIS US survey is:

May-Jun: ESDIS works with each DAAC to confirm survey questions.

Jun-Aug: ESDIS and CFI confirm questions, remove errors and duplications and

transfer questions from text document to the web-based survey tool.

Sept: Announce survey availability to users. Start survey collection for 14

consecutive days (or until a statistically valid number of responses has

been achieved.

Oct-Nov: CFI performs analysis, removes all invalid survey returns, and prepares

the ACSI score and accompanying charts and tables with analysis details.

ACSI score for survey year submitted to HQ.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

There is no issue with the display of the most current expiration date of the ESDIS US. This is not applicable to a survey that is provided to users annually.

18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I. ESDIS does not foresee needing any exceptions as noted in Item 19.

The NASA office conducting or sponsoring this information collection certifies compliance with all provisions listed above.

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