

**SUPPORTING STATEMENT**  
**U.S. Department of Commerce**  
**National Institute of Standards and Technology**  
**Generic Clearance for Usability Data Collections**  
**OMB CONTROL NO. 0693-0043**

**A. JUSTIFICATION**

This is a request to extend the Office of Management and Budget (OMB) approval.

**1. Explain the circumstances that make the collection of information necessary.**

In accordance with the Office of Management and Budget's (OMB) regulations at 5 CFR 1320 implementing the Paperwork Reduction Act (PRA), the Government Performance and Results Modernization Act of 2012, and its mission ...

“To promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.”

the National Institute of Standards and Technology (NIST), a non-regulatory agency of the Department of Commerce (DOC), proposes to conduct a variety of usability data collections under this generic collection.

Individual information collection requests submitted under this generic collection may involve usage of technological devices, such as web sites, handheld computers, cell phones and robots. Collecting this type of information will allow NIST researchers to study human-computer interactions and help establish guidelines and standards for effective and efficient interactions.

Examples of previously approved data collections include multiple collections of information from the medical community in an effort to evaluate and determine the usability of various commercial Electronic Health Record (EHR) products available for use. Other examples of previous collections include the Usability Benchmarks for Voting Systems Research Project, In-depth Interviews of Perceptions of Online Security, Fingerprint Directional Symbols Study, Usability of Biometric Systems, Interacting with Social Media Websites, Usability of Passwords, and Speech-to-Speech Machine Translation.

NIST will limit its inquiries to data collections that solicit strictly voluntary opinions and information, and will not – under this PRA clearance request – collect information that is required (mandatory) or regulated.

For each proposed request using the generic clearance, NIST will submit the actual instrument and any related documents (letters, emails to respondents, scripts, etc.) to OMB along with responses to the following questions:

- 1. Explain who will be surveyed and why the group is appropriate to survey.**
- 2. Explain how the survey was developed including consultation with interested parties, pre-testing, and responses to suggestions for improvement.**
- 3. Explain how the survey will be conducted, how customers will be sampled if fewer than all customers will be surveyed, expected response rate, and actions your agency plans to take to improve the response rate.**
- 4. Describe how the results of the survey will be analyzed and used to generalize the results to the entire customer population.**

The following collections have been previously approved, are ongoing, and are part of this request.

Below is a summary of lessons learned from the ongoing ICs:

#### Public Safety Imaging Systems – Human Perceptions Testing

The initial perception test has shown to be successful: the expected correlation between task performance and perception has been established, and a formula relating human perception and imager performance characteristics to task performance established. The survey results (from questions 1.d, 1.e, and 1.f) have allowed us to assess the quality and/or applicability of the images presented to the PTS and, in conjunction with responses to question 3, whether there is a need to modify future perception test protocols and/or imagery. The aggregate response to these questions indicates that no change needs to be made to the protocols although more imagery may need to be added to represent a greater possibility of scenarios. Inputs to questions 1.a, 1.b, and 1.c provided general information on the collective experience of the PTS to provide demographic information on the PTS population relative to the emergency response population at large. The results indicate that our group is representative. The response to question 2 was used to understand if extenuating circumstances may have affected the perception test; none were discovered.

#### ITL-CSD-Password Generation Study

The first phase of data has been collected and analyzed. A paper entitled “Human Generated Passwords, The Impacts of Password Requirements and Presentation Styles” was presented at the Human Computer Interaction International Conference in August 2015. The second phase of data collection is scheduled to begin in November.

#### ITL- User Perceptions of Online Privacy and Security- Phase 2

In the process of completing data collection and expect to have all data collected by the end of

November 2015.

**2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.**

Data collected by NIST researchers will be used to help plan the direction of future research. The information collected will not be directly disseminated to the public but aspects or portions of the information collected may be used to support research published in various journals and conferences. There will be no attribution to individuals in the analyzed data. Since the data collected from this collection may involve Human Subjects, these individual collection efforts will need to be vetted through and approved by the NIST Institutional Review Board (IRB) as needed or required.

This information collection and dissemination will comply with the NIST Chief Information Officer (CIO) Information Quality Guidelines and Standards. Quality will be ensured and established at levels appropriate to the nature and timeliness of the information to be disseminated and will include all pre-dissemination reviews, as required by the Information Quality Guidelines and Standards.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.**

Whenever possible, improved information technology will be used to reduce burden on NIST's customers. In addition to traditional data collection methods, NIST will, whenever possible, offer electronic response options via the NIST Internet website and by fax.

The planned use of transactional and electronic web site surveys will substantially contribute to the number of projected responses and associated burden hours.

**4. Describe efforts to identify duplication.**

NIST has an internal review process that will examine each survey or data collection effort to be conducted under this generic clearance – to prevent internal duplication of effort and to ensure that appropriate data collection instruments are developed. By examining the three-year, NIST-wide requirements and combining those requirements into a generic clearance request, NIST is, to the greatest extent possible, centralizing the administration of its customer's data collections. This will provide for a more consistent and comprehensive approach. While there may be other surveys or data collections that become the subject of separate clearance requests, NIST is

confident that the procedures in place ensure that there will be no duplication. Due the nature of NIST's unique mission and programs no similar data exists.

Individuals participating in these types of usability data collection efforts may be asked to sign an informed consent document (meaning participants are informed of the data collection and are providing their consent to participate) and no individual will be surveyed more than once for the same research study.

**5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.**

Some small businesses and other small entities may be involved in these efforts, but NIST will keep the burden to them-as well as on any business, organization, or individual-at a minimum by asking for opinions on a strictly voluntary basis and by asking for only the minimum amount of information needed to evaluate usability and utility of NIST research for measurement and standardization work.

**6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.**

If these surveys and other data collections were conducted less frequently or not conducted, NIST researchers would not have important information that may hinder the future direction and scope of NIST research as well as achieving NIST's mission.

**7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.**

The data collections conducted under this generic clearance will be conducted in accordance with the guidelines stated in 5 CFR 1320.05.

**8. Provide citation information for the PRA Federal Register notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.**

A 60-day Federal Register Notice soliciting public comment was published on Thursday, September 17, 2015 (Vol. 80, pg. 55836). No comments were received.

A 30-day Federal Register Notice soliciting public comment was published on Friday, November 20, 2015 (Vol. 80, pg. 72668).

**9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.**

NIST will not provide any payment or gift to respondents to any written, telephone, comment card, or other such information collection. However, if respondents must leave their home or place of business to travel to a specific location, NIST will, on a case-by-case basis, consider a modest remuneration for the participant's travel expenses. In such cases, the remuneration may range from \$25-\$75 per individual, dependent on the data collection and the level and length of participation required of the participants.

Respondents that participate in information collections conducted in a "laboratory" type-setting (such as in-depth interviews, and usability testing, etc.) under this clearance may receive a small stipend to offset the cost of travel expenses. This practice has proven effective when recruiting subjects to participate in specific research, and is employed by other Federal cognitive laboratories. The average incentive for participation in a one-on-one interview or usability is approximately \$40.

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

Individuals will be assured of confidentiality to the extent permitted by law, including the Freedom of Information Act (FOIA), and if applicable, will be given notice of this via an informed consent document tailored for each individual information collection which is approved by the NIST (IRB) prior to the collection. All information collected will be stored anonymously without identifiers. There will be no attribution to individuals in the analyzed data. The Code of Federal Regulations Title 15, Part 27, Protection of Human Subjects, describes the general requirements for informed consent. However, all surveys and, therefore, information provided by respondents will be completely voluntary.

**The Privacy Act (5 U.S.C. § 552a (3))** only requires a Privacy Act Statement when collecting personal information that will be placed or stored in a system of records. NIST will not collect personally identifiable information from respondents that participate in these usability collections.

**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.**

Not applicable, no sensitive data will be collected.

**12. Provide an estimate in hours of the burden of the collection of information.**

The estimated total for the three-year period of approval is 8,500 responses and 5,000 hours.

**13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).**

Not applicable.

**14. Provide estimates of annualized cost to the Federal government.**

It is difficult to estimate the possible Federal costs in advance. The availability of funds and staff resources will impact NIST's ability to conduct all the proposed activities. Consequently, it is uncertain of the number of activities that will be undertaken. In addition, it is difficult to project the number of estimated responses that will be received for data collections. Most of the surveys will be conducted and analyzed using in-house resources, though NIST may contract some of the surveys to be conducted.

**15. Explain the reasons for any program changes or adjustments.**

Not applicable.

**16. For collections whose results will be published, outline the plans for tabulation and publication.**

The results of the data collections may be used in papers published in research journals and presented at conferences. There will be no attribution to individuals in the analyzed data.

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

All written and electronic material will display the expiration date of the OMB approval of the information collection. All written and electronic surveys (with the exception of transactional surveys in the form of business reply cards where space will not permit) will also display the following notification:

This collection of information contains Paperwork Reduction Act (PRA) requirements approved by the Office of Management and Budget (OMB). Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA unless that collection of information displays a currently valid OMB control number. Public reporting burden for this collection is estimated to be XXXXXXXX minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Persons wishing to comment on the burden estimate or any aspect of this collection of information, or offer suggestions for reducing this burden, to the National Institute of Standards and Technology, Attn: XXAdd-Individual-Point-of-Contact\_InformationXX.

OMB Control No. 0693-0043

Expiration Date: XX-XX-XXXX

**18. Explain each exception to the certification statement.**

Not applicable.