includes both national and international organizations. If desired, commenters may provide information about: The type, size, and location of their organization(s); and whether their organization develops AI technology and related tools; uses or potentially uses AI technology and related tools; and/or participates in the development of AI standards or related tools. Provision of such information is optional and will not affect NIST's full consideration of the comment.

Comments containing references—including specific standards and related tools—studies, research, and other empirical data that are not widely published (*e.g.,* available on the internet) should include paper or electronic copies of those materials, unless they are restricted due to copyright or are otherwise proprietary. In those cases, NIST encourages respondents to provide clear descriptions and designations of those references. Do not include in comments or otherwise submit any information deemed to be proprietary, private, or in any way confidential, as all comments relevant to this RFI topic area that are received by the deadline will be made available publicly at *https://www.nist.gov/topics/artificial-intelligence/ai-standards* and *regulations.gov.*

The following list of topics covers the major areas about which NIST seeks information. This list is not intended to limit the topics that may be addressed by respondents, who may provide information about any topic which would inform the development of the Plan. Possible topics, subdivided by area, are:

AI Technical Standards and Related Tools Development: Status and Plans

1. AI technical standards and tools that have been developed, and the developing organization, including the aspects of AI these standards and tools address, and whether they address sector-specific needs or are cross-sector in nature;

2. Reliable sources of information about the availability and use of AI technical standards and tools;

3. The needs for AI technical standards and related tools. How those needs should be determined, and challenges in identifying and developing those standards and tools;

4. AI technical standards and related tools that are being developed, and the developing organization, including the aspects of AI these standards and tools address, and whether they address sector-specific needs or are cross sector in nature;

5. Any supporting roadmaps or similar documents about plans for developing AI technical standards and tools;

6. Whether the need for AI technical standards and related tools is being met in a timely way by organizations; and

7. Whether sector-specific AI technical standards needs are being addressed by sector-specific organizations, or whether those who need AI standards will rely on cross-sector standards which are intended to be useful across multiple sectors.

8. Technical standards and guidance that are needed to establish and advance trustworthy aspects (*e.g.,* accuracy, transparency, security, privacy, and robustness) of AI technologies.

Defining and Achieving U.S. AI Technical Standards Leadership

9. The urgency of the U.S. need for AI technical standards and related tools, and what U.S. effectiveness and leadership in AI technical standards development should look like;

10. Where the U.S. currently is effective and/or leads in AI technical standards development, and where it is lagging;

11. Specific opportunities for, and challenges to, U.S. effectiveness and leadership in standardization related to AI technologies; and

12. How the U.S. can achieve and maintain effectiveness and leadership in AI technical standards development.

Prioritizing Federal Government Engagement in AI Standardization

13. The unique needs of the Federal government and individual agencies for AI technical standards and related tools, and whether they are important for broader portions of the U.S. economy and society, or strictly for Federal applications;

14. The type and degree of Federal agencies' current and needed involvement in AI technical standards to address the needs of the Federal government;

15. How the Federal government should prioritize its engagement in the development of AI technical standards and tools that have broad, cross-sectoral application versus sector- or application-specific standards and tools;

16. The adequacy of the Federal government's current approach for government engagement in standards development,[4] which emphasizes private sector leadership, and, more specifically, the appropriate role and activities for the Federal government to ensure the desired and timely development of AI standards for Federal and non-governmental uses;

17. Examples of Federal involvement in the standards arena (*e.g.,* via its role in communications, participation, and use) that could serve as models for the Plan, and why they are appropriate approaches; and

18. What actions, if any, the Federal government should take to help ensure that desired AI technical standards are useful and incorporated into practice.

[4] *See* the National Technology Transfer and Advancement Act, *https://www.nist.gov/standardsgov/national-technology-transfer-and-advancement-act-1995,* and OMB Circular A–119, *https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-119-1.pdf.*

Kevin A. Kimball,

Chief of Staff.

[FR Doc. 2019–08818 Filed 4–30–19; 8:45 am]

BILLING CODE 3510–13–P

DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

Proposed Information Collection; Comment Request; Analysis of Exoskeleton-Use for Enhancing Human Performance Data Collection

AGENCY: National Institute of Standards and Technology, Commerce.

ACTION: Notice.

SUMMARY: The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995.

DATES: Written comments must be submitted on or before July 1, 2019.

ADDRESSES: Direct all written comments to Jennifer Jessup, Departmental Paperwork Clearance Officer, Department of Commerce, Room 6616, 1401 Constitution Avenue NW, Washington, DC 20230 (or via the internet at *PRAcomments@doc.gov*).

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the information collection instrument and instructions should be directed to Elizabeth Reinhart, NIST Management and Organization Office, 100 Bureau Drive, Gaithersburg, MD 20899; 301–975–8707; *elizabeth.reinhart@nist.gov.*

SUPPLEMENTARY INFORMATION:

I. Abstract

Exoskeletons—sometimes called wearable robots—are a very rapidly

expanding domain with a range of applications and a broad diversity of designs. NIST's Engineering Laboratory will be developing methods to evaluate performance of exoskeletons in two key areas (1) The fit and motion of the exoskeleton device with respect to the users' body and (2) The impact that using an exoskeleton has on the performance of users executing tasks that are representative of activities in industrial settings. The results of these experiments will inform future test method development at NIST, other organizations, and under the purview of the new American Society for Testing Materials (ASTM) Committee F48 on Exoskeletons and Exosuits.

For the first research topic, NIST will evaluate the usefulness of a NIST prototype apparatus for measuring the difference in performance of a person wearing an exoskeleton versus the person's baseline without the exoskeleton while positioning loads and tools. The NIST Position and Load Test Apparatus for Exoskelons (PoLoTAE), which presents abstractions of industrial task challenges, will be evaluated in this research.

For the second research topic, NIST will evaluate a method for measuring the alignment of an exoskeleton to human joint (knee) and any relative movement between the exoskeleton and user. Measurement methods prototyped by NIST for evaluating exoskeleton on mannequin position and motion will be applied to human subjects to verify the usefulness of optical tracking system and designed artifacts worn by users as measurement methods.

Participants will be chosen from volunteers within NIST and adult NIST visitors to participate in the study. Gender and size diversity will be sought in the population of participants. No personally identifiable information (PII) will be recorded unless subject consent for PII disclosure is received. NIST intends to publish information on the analysis and results.

II. Method of Collection

Participants will give informed consent prior to participating in the research. Information may be collected via a paper background questionnaire which may include disclosure of health information which may be relevant for safety and research reasons. Data will be collected using a combination of heart rate monitor, and video and still cameras to collect time and subject activity to correlate heart rate with activity and an optical tracking system which detects markers. Participants will be asked to complete a paper survey once data is collected for the research.

III. Data

OMB Control Number: 0693–0083.

Form Number(s): None.

Type of Review: Revision and extension of a current information collection.

Affected Public: Individuals or households.

Estimated Number of Respondents: 250.

Estimated Time per Response: 1.5 hours.

Estimated Total Annual Burden Hours: 375 hours.

Estimated Total Annual Cost to Public: $0.

IV. Request for Comments

NIST invites comments on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Sheleen Dumas,

Departmental Lead PRA Officer, Office of the Chief Information Officer, Commerce Department.

[FR Doc. 2019–08816 Filed 4–30–19; 8:45 am]

BILLING CODE 3510–13–P

DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

[Docket No. 170810743–8858–01]

RIN 0693–XC079

Announcing Issuance of Federal Information Processing Standard (FIPS) 140–3, Security Requirements for Cryptographic Modules

AGENCY: National Institute of Standards and Technology (NIST), Commerce.

ACTION: Notice.

SUMMARY: This notice announces the Secretary of Commerce's issuance of Federal Information Processing Standard (FIPS) 140–3, Security Requirements for Cryptographic Modules. FIPS 140–3 includes references to existing International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 19790:2012(E) *Information technology—Security techniques—Security requirements for cryptographic modules* and ISO/IEC 24759:2017(E) *Information technology—Security techniques—Test requirements for cryptographic modules.* As permitted by the standards, the NIST Special Publication (SP) series 800–140 will specify updates, replacements, or additions to the currently cited ISO/IEC standard as necessary.

DATES: FIPS 140–3 is effective September 22, 2019. FIPS 140–3 testing will begin on September 22, 2020. FIPS 140–2 testing will continue for at least a year after FIPS 140–3 testing begins.

ADDRESSES: FIPS 140–3 is available electronically from the NIST website at: *https://csrc.nist.gov/publications/fips*. Comments that were received on the proposed changes are also published electronically at *https://csrc.nist.gov/projects/fips-140-3-development.*

FOR FURTHER INFORMATION CONTACT: Michael Cooper, (301) 975–8077, National Institute of Standards and Technology, 100 Bureau Drive, Mail Stop 8930, Gaithersburg, MD 20899–8930, email: *michael.cooper@nist.gov*.

SUPPLEMENTARY INFORMATION: NIST has been participating in the ISO/IEC process for developing standards for cryptographic modules and working closely with international industry to unify several cryptographic security standards. ISO/IEC 19790:2012(E), *Information technology—Security techniques—Security requirements for cryptographic modules,* is an international standard based on updates of the earlier versions of FIPS 140, *Security Requirements for Cryptographic Modules.* ISO/IEC 24759:2017(E), *Information technology—Security techniques—Test requirements for cryptographic modules* is an international standard based on the Derived Test Requirements for FIPS 140–2, *Security Requirements for Cryptographic Modules.* The National Technology Transfer and Advancement Act (NTTAA), Public Law 104–113, directs Federal agencies with respect to their use of and participation in the development of voluntary consensus standards. The NTTAA's objective is for Federal agencies to adopt voluntary consensus standards, wherever possible, in lieu of creating proprietary, non-consensus standards. The implementation of commercial