19 July 2018

The Honorable John McCain
Chairman
Committee on Armed Services
United States Senate
Washington, DC 20510

The Honorable Jack Reed
Ranking Member
Committee on Armed Services
United Sates Senate
Washington, DC 20510

The Honorable Mac Thornberry
Chairman
Committee on Armed Services
House of Representatives
Washington, DC 20515

The Honorable Adam Smith
Ranking Member
Committee on Armed Services
House of Representatives
Washington, DC 20515

Dear Chairman McCain, Ranking Member Reed, Chairman Thornberry, and Ranking Member Smith,

As you prepare to go to conference on the FY19 National Defense Authorization Act (NDAA), IEEE-USA requests that you incorporate into the final version a modification of language (attached) found in S.2217 (*FUTURE of Artificial Intelligence Act of 2017*) that creates a National Artificial Intelligence Advisory Committee. The committee would be established in the White House Office of Science and Technology to review the methods and means necessary to advance America's development of artificial intelligence, machine learning, and associated technologies, and to make recommendations to Congress and the Executive Branch agencies. The modification ensures a diverse Committee membership which we believe to be essential for the Committee's success.

IEEE-USA believes that the Committee composition, as laid out in the draft language, reflects a broad range of technology professionals across all sectors (public, private, non-profit, technical and standards setting organizations, etc.) with expertise in artificial intelligence, and provides a good balance of both civil society and national security needs without compromising our national priorities.

The proposed AI Committee must be able to tap the broadest possible set of experiences, insights, training, and perspectives to succeed. AI technology will have profound impacts on all segments of American society. Understanding exactly what those impacts will be requires diverse expertise from all sectors of AI research and development, not just government.

IEEE-USA represents more than 180,000 engineers, scientists and allied professionals across the United States, and is the American component of the IEEE – the largest organization of technology professionals in the world.

Thank you.

Sincerely,

Sandra L. Robinson
2018 President, IEEE-USA

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ATTACHMENT:

NATIONAL ARTIFICIAL INTELLIGENCE ADVISORY COMMITTEE.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—The Director of the White House Office of Science and Technology Policy shall establish a National Artificial Intelligence Advisory Committee to review advances in artificial intelligence, related machine learning developments, and associated technologies and to make recommendations to Congress and the Executive Branch.

(2) DESIGNATION.—The Advisory Committee established under paragraph (1) shall be known as the "National Artificial Intelligence Advisory Committee".

(3) MEMBERSHIP.—

(A) COMPOSITION.—The Advisory Committee shall be composed of at least 15 members with representation from:

(i) private sector industry, including small business concerns;

(ii) the academic and research community,

(iii) the defense community;

(iv) civil society, including groups that advocate for civil liberties or civil rights;

(v) labor organizations or groups; and

(vi) other appropriate organizations.

(B) CONSIDERATION.— In selecting members of the Advisory Committee, the Director of the White House Office of Science and Technology Policy shall seek and give consideration to recommendations from the Congress, including:

(i) The Committee on Commerce, Science, and Transportation of the Senate.

(ii) The Committee on Energy and Commerce of the House of Representatives.

(iii) The Committee on Science, Space, and Technology of the House of Representatives.

(iv) The Committee on Armed Services of the Senate.

(v) The Committee on Armed Services of the House of Representatives.

(vi) The the Select Committee on Intelligence of the Senate

(vii) The Permanent Select Committee on Intelligence of the House of Representatives.

(C) DEADLINE FOR APPOINTMENT.—Members shall be appointed to the Advisory Committee not later than 90 days after the Advisory Committee establishment date.

(5) CHAIR AND VICE CHAIR.—The Director of the White House Office of Science and Technology Policy shall designate a Chair and Vice Chair from among the Advisory Committee members.

(6) MEETINGS.—The Advisory Committee shall meet—

(A) in person not less frequently than twice each year; and

(B) via telepresence not less frequently than once every three months.

(7) SUBCOMMITTEES.—The Chair and Vice Chair designated under subparagraph (5) in coordination with the Director of the White House Office of Science and Technology Policy, shall establish subcommittees within the Advisory Committee, including on the following:

(A) economic security and competitiveness, and

(B) national security and defense.

(b) DUTIES.—

(1) IN GENERAL.— In carrying out the review and recommendations under paragraph (a)(1), the Advisory Committee shall consider the methods and means necessary to advance the development of artificial intelligence, machine learning, and associated technologies by the United States to comprehensively address the economic, national security, and defense needs of the United States.

(2) SCOPE OF THE REVIEW.—In conducting the review and recommendations under paragraph (a)(1), the shall consider the following:

(A) The competitiveness of the United States in artificial intelligence, machine learning, and other associated technologies, including the promotion of public and private sector investment and innovation.

(B) Means and methods, including research and development, for the United States to maintain a technological advantage in artificial intelligence, machine learning, and other associated technologies.

(C) International cooperation and competitiveness, including foreign investments in artificial intelligence, related machine learning, and computer science fields.

(D) Means by which to foster greater emphasis and investments in basic and advanced research to stimulate private, public, academic and combined initiatives in artificial intelligence, machine learning, and other associated technologies.

(E) Workforce and education matters, including incentives to attract and recruit leading talent in artificial intelligence and machine learning disciplines, including science, technology, engineering, and math programs, and the potential for using artificial intelligence for rapid retraining of workers due to technological displacement.

(F) Risks associated with United States and foreign country advances in military employment of artificial intelligence and machine learning, including international law of armed conflict, international humanitarian law, and escalation dynamics.

(G) Ethical considerations related to artificial intelligence and machine learning as it will be used for future applications, including ethics training and development for technologists working on artificial intelligence.

(H) Means to establish data standards, and incentivize the sharing of open training data within data-driven industries.

(I) Consideration of the evolution of artificial intelligence and appropriate mechanism for managing such technology.

(J) Accountability and legal rights, including matters relating to the responsibility for any violations of laws by an artificial intelligence system and the compatibility of international regulations.

(K) Matters relating to machine learning bias through core cultural and societal norms.

(L) Matters relating to how artificial intelligence can serve or enhance opportunities in rural communities.

(M) Government efficiency, including matters relating to how to promote cost saving and streamline operations.

(N) Any other matters the Advisory Committee deems relevant to the U.S. economy or the common defense of the Nation.

(3) STUDY.—The Advisory Committee shall specifically study and assess the following:

(A) How to create a climate for public and private sector investment and innovation in artificial intelligence.

(B) The possible benefits and effects that the development of artificial intelligence may have on the economy, workforce, and competitiveness of the United States.

(C) Whether and how networked, automated, artificial intelligence applications and robotic devices will displace or create jobs and how any job related gains relating to artificial intelligence can be maximized.

(D) How bias can be identified and eliminated in the development of artificial intelligence and in the algorithms that support them, including with respect to the following:

(i) The selection and processing of data used to train artificial intelligence.

(ii) Diversity in the development of artificial intelligence.

(iii) The ways and places the systems are deployed and the potential harmful outcomes.

(E) Whether and how to incorporate ethical standards in the development and implementation of artificial intelligence.

(F) How the Federal Government can encourage technological progress in implementation of artificial intelligence that benefits the full spectrum of social and economic classes.

(G) How the privacy rights of individuals are or will be affected by technological innovation relating to artificial intelligence.

(H) Whether technological advancements in artificial intelligence have or will outpace the legal and regulatory regimes implemented to protect consumers.

(I) How existing laws, including those concerning data access and privacy, should be modernized to enable the potential of artificial intelligence.

(J) How the Federal Government utilizes artificial intelligence to handle large or complex data sets.

(K) How ongoing dialogues and consultations with multi-stakeholder groups can maximize the potential of artificial intelligence and further development of artificial intelligence technologies that can benefit everyone inclusively.

(L) How the development of artificial intelligence can affect cost savings and streamline operations in various areas of government operations, including health care, cybersecurity, infrastructure, and disaster recovery.

(M) Such other matters as the Advisory Committee considers appropriate.

(c) POWERS.—In order to carry out the duties under subsection (b), the Advisory Committee may—

(1) hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence as the Advisory Committee considers appropriate;

(2) submit to Congress such recommendations as the Advisory Committee considers appropriate;

(3) submit to Federal agencies such recommendations as the Advisory Committee considers appropriate;

(4) issue reports, guidelines, and memoranda;

(5) hold or host conferences and symposia;

(6) enter into cooperative agreements with third-party experts, including the National Academies, to obtain relevant advice or expertise, and oversee staff;

(7) establish subcommittees; and

(8) establish rules of procedure.

(d) REPORTS AND RECOMMENDATIONS.—

(1) INITIAL REPORT.—Not later than one year after the date of the enactment of this Act, the Advisory Committee shall submit to the Director of the White House Office of Science and Technology Policy and Congress an initial report on the findings of the Advisory Committee and such recommendations that the Advisory Committee may have for action by the executive branch and Congress related to artificial intelligence, machine learning, and associated technologies, including recommendations to more effectively organize the Federal Government.

(2) ANNUAL REPORT UPDATES.— Every year annually after the submission of the initial report required under subparagraph (1), until the date specified in subsection (e), the Commission shall submit a report with additional review findings and recommendations for action.

(3) FORM OF REPORTS.—Reports submitted under this subsection shall be made publically available, but may include a classified annex.

(e) FUNDING.—

(1) IN GENERAL.—Except as provided in paragraph (2), amounts to carry out this section shall be derived from amounts appropriated or otherwise made available to the Department of Commerce, the Department of Defense, and the National Science Foundation.

(2) DONATIONS.—

(A) AUTHORIZATION.—The Advisory Committee may solicit and accept donations from private persons and non-Federal entities to carry out this section.

(B) LIMITATION.—Of the amounts expended by the Advisory Committee in a fiscal year to carry out this section, not more than half may be derived from amounts received under subparagraph (A).

(f) TERMINATION.—The Advisory Committee shall terminate on October 1, 2021, unless the Director of the White House Office of Science and Technology Policy determines that the Advisory Committee is necessary to meet national economic or national security needs.

(g) TRAVEL EXPENSES.— The members of the Advisory Committee shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for employees of agencies under subchapter I of chapter 57 of title 5, United States Code, while away from their homes or regular places of business in the performance of services for the Advisory Committee.

(h) EXEMPTION.— The Advisory Committee shall be exempt from section 14 of the Federal Advisory Committee Act (5 U.S.C. App.).