To require the Secretary of Commerce to establish national cybersecurity grand challenges, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. WICKER (for himself, Ms. ROSEN, and Mr. GARNDER) introduced the following bill; which was read twice and referred to the Committee on

A BILL

To require the Secretary of Commerce to establish national cybersecurity grand challenges, and for other purposes.

Be it enacted by the Senate and House of Representa-
tives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Cybersecurity Competi-
tions to Yield Better Efforts to Research the Latest Ex-
ceptionally Advanced Problems Act of 2020” or the
“Cyber Leap Act of 2020”.

9MX 3R RTK
SEC. 2. NATIONAL CYBERSECURITY GRAND CHALLENGES.

(a) IN GENERAL.—Title II of the Cybersecurity Enhancement Act of 2014 (15 U.S.C. 7431 et seq.) is amended by adding at the end the following:

SEC. 205. NATIONAL CYBERSECURITY GRAND CHALLENGES.

“(a) Establishment of National Cybersecurity Grand Challenges.—

“(1) IN GENERAL.—To achieve high-priority breakthroughs in cybersecurity by 2028, the Secretary of Commerce shall establish the following national cybersecurity grand challenges:

“(A) Economics of a Cyber Attack.—

Building more resilient systems that measurably and exponentially raise adversary costs of carrying out common cyber attacks.

“(B) Cyber Training.—

“(i) Empowering the people of the United States with an appropriate and measurably sufficient level of digital literacy to make safe and secure decisions online.

“(ii) Developing a cybersecurity workforce with measurable skills to protect and maintain information systems.
“(C) EMERGING TECHNOLOGY.—Advancing cybersecurity efforts in response to emerging technology, such as artificial intelligence, quantum science, and next generation communications technologies.

“(D) REIMAGINING DIGITAL IDENTITY.—Maintaining a high sense of usability while improving the security and safety of online activity of individuals in the United States.

“(E) FEDERAL AGENCY RESILIENCE.—Reducing cybersecurity risks to Federal networks and systems, and improving the response of Federal agencies to cybersecurity incidents on such networks and systems.

“(F) OTHER CHALLENGES.—Such other challenges as the Secretary of Commerce considers appropriate to achieve high-priority breakthroughs in cybersecurity.

“(2) CONSIDERATIONS.—In carrying out paragraph (1), the Secretary shall consider the recommendations set forth in the report of the National Security Telecommunications Advisory Committee entitled ‘NSTAC Report to the President on a Cybersecurity Moonshot’ and dated November 14, 2018.
“(b) Pursuit of National Cybersecurity Grand Challenges.—

“(1) In General.—Not later than 180 days after the date of the enactment of the Cybersecurity Competitions to Yield Better Efforts to Research the Latest Exceptionally Advanced Problems Act of 2020, the Secretary, acting through the Under Secretary of Commerce for Standards and Technology, shall commence efforts to pursue the national cybersecurity grand challenges established under subsection (a).

“(2) Competitions.—The efforts required by paragraph (1) shall include carrying out programs to award prizes, including cash and noncash prizes, competitively pursuant to the authorities and processes established under section 24 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3719) or any other applicable provision of law.

“(3) Additional Authorities.—In carrying out paragraph (1), the Secretary may enter into and perform such other transactions as the Secretary considers necessary and on such terms as the Secretary considers appropriate.
“(4) COORDINATION.—In pursuing national cybersecurity grand challenges under paragraph (1), the Secretary shall coordinate with the following:

“(A) The Director of the National Science Foundation.

“(B) The Director of the Cybersecurity and Infrastructure Security Agency.

“(C) The Director of the Defense Advanced Research Projects Agency.

“(D) The Director of the Office of Science and Technology Policy.

“(E) The Director of the Office of Management and Budget.

“(F) The Administrator of the General Services Administration.


“(H) The heads of such other Federal agencies as the Secretary of Commerce considers appropriate for purposes of this section.

“(5) SOLICITATION OF ACCEPTANCE OF FUNDS.—Pursuant to section 24 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3719), the Secretary shall request and accept funds from other Federal agencies, State, United States territory, local, or tribal government agencies,
private sector for-profit entities, and nonprofit enti-
ties to support efforts to pursue a national cyberse-
curity grand challenge under this section.

“(c) RECOMMENDATIONS.—

“(1) IN GENERAL.—In carrying out this sec-
tion, the Secretary of Commerce shall designate an
advisory council to seek recommendations.

“(2) ELEMENTS.—The recommendations re-
quired by paragraph (1) shall include the following:

“(A) A scope for efforts carried out under
subsection (b).

“(B) Metrics to assess submissions for
prizes under competitions carried out under
subsection (b) as the submissions pertain to the
national cybersecurity grand challenges estab-
lished under subsection (a).”.

(b) CONFORMING AMENDMENTS.—Section 201(a)(1)
of such Act is amended—

(1) in subparagraph (J), by striking “; and”
and inserting a semicolon;

(2) by redesignating subparagraph (K) as sub-
paragraph (L); and

(3) by inserting after subparagraph (J) the fol-
lowing:
“(K) implementation of section 205 through research and development on the topics identified under subsection (a) of such section; and”.

(c) CLERICAL AMENDMENT.—The table of contents in section 1(b) of such Act is amended by inserting after the item relating to section 204 the following:

“Sec. 205. National Cybersecurity Grand Challenges.”.