

FUTURE USES OF TECHNOLOGY UPHOLDING RELIABLE
AND ENHANCED NETWORKS ACT

NOVEMBER 30, 2021.—Committed to the Committee of the Whole House on the
State of the Union and ordered to be printed

Mr. PALLONE, from the Committee on Energy and Commerce,
submitted the following

R E P O R T

[To accompany H.R. 4045]

The Committee on Energy and Commerce, to whom was referred the bill (H.R. 4045) to direct the Federal Communications Commission to establish a task force to be known as the “6G Task Force”, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

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The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Future Uses of Technology Upholding Reliable and Enhanced Networks Act” or the “FUTURE Networks Act”.

SEC. 2. 6G TASK FORCE.

(a) **ESTABLISHMENT.**—Not later than 120 days after the date of the enactment of this Act, the Commission shall establish a task force to be known as the “6G Task Force”.

(b) **MEMBERSHIP.**—

(1) **APPOINTMENT.**—The members of the Task Force shall be appointed by the Chair.

(2) **COMPOSITION.**—To the extent practicable, the membership of the Task Force shall be composed of the following:

(A) Representatives of companies in the communications industry, except companies that are determined by the Chair to be not trusted.

(B) Representatives of public interest organizations or academic institutions, except public interest organizations or academic institutions that are determined by the Chair to be not trusted.

(C) Representatives of the Federal Government, State governments, local governments, or Tribal Governments, with at least one member representing each such type of government.

(c) **REPORT.**—

(1) **IN GENERAL.**—Not later than 1 year after the date on which the Task Force is established under subsection (a), the Task Force shall publish in the Federal Register and on the website of the Commission, and submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate, a report on sixth-generation wireless technology, including—

(A) the status of industry-led standards-setting bodies in setting standards for such technology;

(B) possible uses of such technology identified by industry-led standards-setting bodies that are setting standards for such technology;

(C) any limitations of such technology (including any supply chain or cybersecurity limitations) identified by industry-led standards-setting bodies that are setting standards for such technology; and

(D) how to best work with entities across the Federal Government, State governments, local governments, and Tribal Governments to leverage such technology, including with regard to siting, deployment, and adoption.

(2) **DRAFT REPORT; PUBLIC COMMENT.**—The Task Force shall—

(A) not later than 180 days after the date on which the Task Force is established under subsection (a), publish in the Federal Register and on the website of the Commission a draft of the report required by paragraph (1); and

(B) accept public comments on such draft and take such comments into consideration in preparing the final version of such report.

(d) **DEFINITIONS.**—In this section:

(1) **CHAIR.**—The term “Chair” means the Chair of the Commission.

(2) **COMMISSION.**—The term “Commission” means the Federal Communications Commission.

(3) **NOT TRUSTED.**—

(A) **IN GENERAL.**—The term “not trusted” means, with respect to an entity, that—

(i) the Chair has made a public determination that such entity is owned by, controlled by, or subject to the influence of a foreign adversary; or

(ii) the Chair otherwise determines that such entity poses a threat to the national security of the United States.

(B) **CRITERIA FOR DETERMINATION.**—In making a determination under subparagraph (A)(ii), the Chair shall use the criteria described in paragraphs (1) through (4) of section 2(c) of the Secure and Trusted Communications Networks Act of 2019 (47 U.S.C. 1601(c)), as appropriate.

(4) **STATE.**—The term “State” has the meaning given such term in section 3 of the Communications Act of 1934 (47 U.S.C. 153).

(5) **TASK FORCE.**—The term “Task Force” means the 6G Task Force established under subsection (a).

I. PURPOSE AND SUMMARY

H.R. 4045, the “Future Uses of Technology Upholding Reliable and Enhanced Networks Act” or the “FUTURE Networks Act,” directs the Chair of the Federal Communications Commission (FCC) to establish a task force to examine the possible uses, strengths,

and limitations of sixth-generation (6G) wireless networks, including cybersecurity and supply chain.

II. BACKGROUND AND NEED FOR LEGISLATION

As consumer demand drives an increasing number and diversity of wireless devices, the United States faces converging security, supply chain, and other policy issues related to wireless networks. Vulnerable internet of things devices can be hijacked by third parties to target other parts of the network infrastructure, exposing networks to risk.¹ Wireless networks can also be exposed to risk by their own network components.² The United States is engaged in a global race to produce innovative new wireless technologies, lest the nation be relegated to relying on suspect equipment, technologies, or services.³

Though fifth-generation wireless networks and connectivity is only beginning to be utilized, United States communications and technology companies are already beginning to collaborate and discuss 6G networks.⁴ Identifying security and supply chain issues early in this process will help policymakers and industry proactively address potential problems and limitations, while keeping American innovators on the cutting edge.

III. COMMITTEE HEARINGS

For the purposes of clause 3(c) of rule XIII of the Rules of the House of Representatives, the following hearings were used to develop or consider H.R. 4045:

The Subcommittee on Communications and Technology held a hearing on April 21, 2021, entitled “Leading the Wireless Future: Securing American Network Technology.” The Subcommittee received testimony from the following witnesses:

- John Baker, Senior Vice President, Business Development; Mavenir;
- John Mezzalingua, Chief Executive Officer, JMA Wireless;
- Tim Donovan, SVP, Legislative Affairs, Competitive Carriers Association;
- Tareq Amin, EVP and Group Chief Technology Officer, Rakuten Mobile; and
- Diane Rinaldo, Executive Director, Open RAN Policy Coalition.

The Subcommittee on Communications and Technology held a legislative hearing on June 30, 2021, entitled “A Safe Wireless Future: Securing our Networks and Supply Chains.” The Subcommittee received testimony from the following witnesses:

- Dileep Srihari, Senior Policy Counsel, Access Partnership;
- Dean Brenner, Senior Vice President—Spectrum Strategy and Tech Policy, Qualcomm Incorporated;
- Jason Boswell, Head of Security, Network Product Solutions, N.A., Ericsson; and

¹ Pete Burke, *Protecting critical Internet Infrastructure from IoT Device Risks*, GCN (Dec. 10, 2018) (<https://gcn.com/articles/2018/12/10/iot-critical-infrastructure.aspx>).

² U.S.-China Economic Security Review Commission, *Supply Chain Vulnerabilities from China in US Federal Information and Communications Technology* (Apr. 2018).

³ *Id.*

⁴ Anna Akins, *6G Wireless: What It Is and When It's Coming*, S&P Global, Market Intelligence (March 4, 2021) (www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/6g-wireless-what-it-is-and-when-it-s-coming-62956538).

- Clete Johnson, Senior Fellow, Strategic Technologies Program, Center for Strategic and International Studies.

IV. COMMITTEE CONSIDERATION

H.R. 4045, the “Future Uses of Technology Upholding Reliable and Enhanced Networks Act” or “FUTURE Networks Act,” was introduced on June 22, 2021, by Representatives Mike Doyle (D–PA), Lucy McBath (D–GA), and Bill Johnson (R–OH), which was referred to the Committee on Energy and Commerce. Subsequently, on June 23, 2021, H.R. 4045 was referred to the Subcommittee on Communications and Technology. A legislative hearing was held on the bill on June 30, 2021.

On July 20, 2021, the Subcommittee on Communications and Technology was discharged from further consideration of the bill. On July 21, 2021, the full Committee met in open markup session, pursuant to notice, to consider H.R. 4045 and 23 other bills. During consideration of the bill, an amendment in the nature of a substitute (AINS) offered by Representative Kelly (D–IL) was agreed to by a voice vote. Upon conclusion of consideration of the bill, the full Committee agreed to a motion on final passage offered by Representative Pallone (D–NJ), Chairman of the Committee, to order H.R. 4045 reported favorably to the House, amended, by a voice vote.

V. COMMITTEE VOTES

Clause 3(b) of rule XIII of the Rules of the House of Representatives requires the Committee to list each record vote on the motion to report legislation and amendments thereto. The Committee advises that there were no record votes taken on H.R. 4045, including a motion by Mr. Pallone ordering H.R. 4045 favorably reported to the House, amended.

VI. OVERSIGHT FINDINGS

Pursuant to clause 3(c)(1) of rule XIII and clause 2(b)(1) of rule X of the Rules of the House of Representatives, the oversight findings and recommendations of the Committee are reflected in the descriptive portion of the report.

VII. NEW BUDGET AUTHORITY, ENTITLEMENT AUTHORITY, AND TAX EXPENDITURES

Pursuant to 3(c)(2) of rule XIII of the Rules of the House of Representatives, the Committee adopts as its own the estimate of new budget authority, entitlement authority, or tax expenditures or revenues contained in the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

The Committee has requested but not received from the Director of the Congressional Budget Office a statement as to whether this bill contains any new budget authority, spending authority, credit authority, or an increase or decrease in revenues or tax expenditures.

VIII. FEDERAL MANDATES STATEMENT

The Committee adopts as its own the estimate of Federal mandates prepared by the Director of the Congressional Budget Office pursuant to section 423 of the Unfunded Mandates Reform Act.

IX. STATEMENT OF GENERAL PERFORMANCE GOALS AND OBJECTIVES

Pursuant to clause 3(c)(4) of rule XIII, the general performance goal or objective of this legislation is to establish a task force on sixth-generation wireless technology at the Federal Communications Commission, to ensure experts, policymakers, and other stakeholders can proactively identify and address security, supply chain, and other issues in next generation wireless networks.

X. DUPLICATION OF FEDERAL PROGRAMS

Pursuant to clause 3(c)(5) of rule XIII, no provision of H.R. 4045 is known to be duplicative of another Federal program, including any program that was included in a report to Congress pursuant to section 21 of Public Law 111–139 or the most recent Catalog of Federal Domestic Assistance.

XI. COMMITTEE COST ESTIMATE

Pursuant to clause 3(d)(1) of rule XIII, the Committee adopts as its own the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

XII. EARMARKS, LIMITED TAX BENEFITS, AND LIMITED TARIFF BENEFITS

Pursuant to clause 9(e), 9(f), and 9(g) of rule XXI, the Committee finds that H.R. 4045 contains no earmarks, limited tax benefits, or limited tariff benefits.

XIII. ADVISORY COMMITTEE STATEMENT

No advisory committee within the meaning of section 5(b) of the Federal Advisory Committee Act was created by this legislation.

XIV. APPLICABILITY TO LEGISLATIVE BRANCH

The Committee finds that the legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act.

XV. SECTION-BY-SECTION ANALYSIS OF THE LEGISLATION

Section 1. Short title

Section 1 designates that the short title may be cited as the “Future Uses of Technology Upholding Reliable and Enhanced Networks Act”, or the “FUTURE Networks Act.”

Sec. 2. 6G Task Force

Section 2 directs the Federal Communications Commission (Commission) to establish, within 120 days, a task force (Task Force) on 6G wireless networks.

It provides that the Chair of the Commission (Chair) can appoint members to the Task Force, which, to the extent practicable, shall be composed of representatives from companies in the communications industry, except those companies determined by the Chair to be not trusted; representatives from public interest or academia, except from organizations or institutions determined by the Chair to be not trusted; and representatives of the Federal government, state and local government, and Tribal governments.

The legislation also requires the Council to publish a report of its work, not later than one year after enactment of the Act, that addresses a number of issues, including the status of any standards-setting bodies working on 6G standards; identification of the limitations of 6G technology, including supply chain and cybersecurity, identified by the standard-setting bodies; and possible uses of 6G identified by the standard-setting bodies. The legislation requires that a draft of the report be published within 120 days after the legislation is enacted, for public comment. The final report shall also be submitted to the Committee on Energy and Commerce in the House of Representatives, and the Committee on Commerce, Science, and Transportation in the United States Senate.

Finally, the section defines terms used in the legislation, including “not trusted.”

XVI. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

There are no changes to existing law made by the bill H.R. 4045.