

INSTITUTE FOR TELECOMMUNICATION SCIENCES
 CODIFICATION ACT

APRIL 24, 2023.—Committed to the Committee of the Whole House on the State of
 the Union and ordered to be printed

Mrs. RODGERS of Washington, from the Committee on Energy and
 Commerce, submitted the following

R E P O R T

[To accompany H.R. 1343]

[Including cost estimate of the Congressional Budget Office]

The Committee on Energy and Commerce, to whom was referred the bill (H.R. 1343) to codify the Institute for Telecommunication Sciences and to direct the Assistant Secretary of Commerce for Communications and Information to establish an initiative to support the development of emergency communication and tracking technologies, and for other purposes, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

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PURPOSE AND SUMMARY

H.R. 1343, the “Institute for Telecommunication Sciences Codification Act” or the “ITS Codification Act,” amends the National Telecommunications and Information Administration (NTIA) Organization Act by providing additional statutory authority for the Institute for Telecommunication Sciences (ITS). It also requires the Assistant Secretary of Commerce for Communications and Information (Assistant Secretary) to establish an initiative to support the development of emergency communication and tracking technologies.

BACKGROUND AND NEED FOR LEGISLATION

The National Telecommunications and Information Administration (NTIA), an agency within the Department of Commerce, has the authority to assign and oversee the spectrum usage rights of federal government agencies as well as represent the federal government on spectrum policy matters before the Federal Communications Commission (FCC). For over 40 years, ITS has served as the premier engineering test center for the NTIA. ITS manages the telecommunications technology development programs of NTIA and the Department of Commerce as well as oversees certain telecommunications and spectrum test activities of other federal agencies through various interagency agreements. In certain instances, ITS will also engage directly with industry and academia through cooperative agreements. Codifying ITS will provide the test center with a solid foundation to continue its critical mission in conducting telecommunications technology and radiofrequency programs, as well as allow it to continue to study and develop emergency communications technologies so that these tools can help locate individuals when radio communication may be severely limited in the event of building collapses and natural disasters.

COMMITTEE ACTION

The Subcommittee on Communications and Technology held a hearing on March 16, 2022. The hearing was entitled, “5G and Beyond: Exploring the Next Wireless Frontier.” The Subcommittee received testimony from the following witnesses:

- Scott Bergmann, Senior Vice President, Regulatory Affairs, CTIA;
- Mary L. Brown, Senior Director, Government Affairs, Cisco Systems, Inc.;
- Greg Guice, Director of Government Affairs, Public Knowledge;
- Jayne Stancavage, Global Executive Director for Product and Digital Infrastructure Policy, Intel Corporation; and
- Von Todd, Chief Executive of Corporate Strategy and Analytics, HTC Inc. and Director, Competitive Carriers Association Board of Directors.

The Subcommittee on Communications and Technology held a hearing on May 24, 2022. The hearing was entitled, “Strengthening Our Communications Networks: Legislation to Connect and Protect.” The Subcommittee received testimony from the following witnesses:

- Mark Gibson, Director, Business Development & Spectrum Policy, CommScope and Regulatory Officer of the OnGo Alliance;
- Anna M. Gomez, Partner, Wiley Rein LLP;
- Thomas E. Kadri, Ph.D., Assistant Professor, University of Georgia School of Law; and
- Alisa Valentin, Ph.D., Senior Director of Technology and Telecommunications, National Urban League.

On March 8, 2023, the Subcommittee on Communications and Technology met in open markup session and forwarded H.R. 1343, without amendment, to the full Committee by a record vote of 27 yeas and 0 nays. On March 23, 2023, the full Committee on Energy and Commerce met in open markup session and ordered H.R. 1343, without amendment, favorably reported to the House by a record vote of 49 yeas and 0 nays.

COMMITTEE VOTES

Clause 3(b) of rule XIII requires the Committee to list the record votes on the motion to report legislation and amendments thereto. The following reflects the record votes taken during the Committee consideration:

**COMMITTEE ON ENERGY AND COMMERCE
118TH CONGRESS
ROLL CALL VOTE # 11**

BILL: H.R. 1343, the ITS Codification Act

AMENDMENT: A motion by Mrs. Rodgers to order H.R. 1343 favorably reported to the House, without amendment (Final Passage).

DISPOSITION: **AGREED TO**, by a roll call vote of 49 yeas and 0 nays.

| REPRESENTATIVE | YEAS | NAYS | PRESENT | REPRESENTATIVE | YEAS | NAYS | PRESENT |
|-------------------|------|------|---------|----------------------|------|------|---------|
| Rep. Rodgers | X | | | Rep. Pallone | X | | |
| Rep. Burgess | X | | | Rep. Eshoo | X | | |
| Rep. Latta | X | | | Rep. DeGette | X | | |
| Rep. Guthrie | X | | | Rep. Schakowsky | X | | |
| Rep. Griffith | X | | | Rep. Matsui | X | | |
| Rep. Bilirakis | X | | | Rep. Castor | X | | |
| Rep. Johnson | X | | | Rep. Sarbanes | X | | |
| Rep. Bucshon | | | | Rep. Tonko | X | | |
| Rep. Hudson | X | | | Rep. Clarke | X | | |
| Rep. Walberg | X | | | Rep. Cárdenas | X | | |
| Rep. Carter | X | | | Rep. Ruiz | X | | |
| Rep. Duncan | X | | | Rep. Peters | X | | |
| Rep. Palmer | X | | | Rep. Dingell | X | | |
| Rep. Dunn | X | | | Rep. Veasey | X | | |
| Rep. Curtis | X | | | Rep. Kuster | X | | |
| Rep. Lesko | X | | | Rep. Kelly | | | |
| Rep. Pence | X | | | Rep. Barragán | X | | |
| Rep. Crenshaw | X | | | Rep. Blunt Rochester | X | | |
| Rep. Joyce | X | | | Rep. Soto | X | | |
| Rep. Armstrong | | | | Rep. Craig | X | | |
| Rep. Weber | X | | | Rep. Schrier | X | | |
| Rep. Allen | X | | | Rep. Trahan | X | | |
| Rep. Balderson | X | | | Rep. Fletcher | X | | |
| Rep. Fulcher | X | | | | | | |
| Rep. Pfluger | X | | | | | | |
| Rep. Harshbarger | X | | | | | | |
| Rep. Miller-Meeks | X | | | | | | |
| Rep. Cammack | X | | | | | | |
| Rep. Obernolte | X | | | | | | |
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03/23/2023

OVERSIGHT FINDINGS AND RECOMMENDATIONS

Pursuant to clause 2(b)(1) of rule X and clause 3(c)(1) of rule XIII, the Committee held hearings and made findings that are reflected in this report.

NEW BUDGET AUTHORITY, ENTITLEMENT AUTHORITY,
AND TAX EXPENDITURES

Pursuant to clause 3(c)(2) of rule XIII, the Committee finds that H.R. 1343 would result in no new or increased budget authority, entitlement authority, or tax expenditures or revenues.

CONGRESSIONAL BUDGET OFFICE ESTIMATE

Pursuant to clause 3(c)(3) of rule XIII, Pursuant to clause 3(c)(3) of rule XIII, the following is the cost estimate provided by the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

| H.R. 1343, ITS Codification Act | | | |
|--|------|--|---------------|
| As ordered reported by the House Committee on Energy and Commerce on March 24, 2023 | | | |
| By Fiscal Year, Millions of Dollars | 2023 | 2023-2028 | 2023-2033 |
| Direct Spending (Outlays) | 0 | 0 | 0 |
| Revenues | 0 | 0 | 0 |
| Increase or Decrease (-) in the Deficit | 0 | 0 | 0 |
| Spending Subject to Appropriation (Outlays) | * | 4 | not estimated |
| Increases <i>net direct spending</i> in any of the four consecutive 10-year periods beginning in 2034? | No | Statutory pay-as-you-go procedures apply? No | |
| | | Mandate Effects | |
| Increases <i>on-budget deficits</i> in any of the four consecutive 10-year periods beginning in 2034? | No | Contains intergovernmental mandate? No | |
| | | Contains private-sector mandate? No | |
| * = between zero and \$500,000. | | | |

H.R. 1343 would authorize and specify responsibilities for the Institute for Telecommunication Sciences (ITS), which is a research and engineering laboratory at the National Telecommunications and Information Administration (NTIA). In 2023, the NTIA allocated \$14 million for the ITS.

H.R. 1343 would require the ITS to develop emergency communication and tracking technologies to locate trapped individuals in confined spaces, such as underground mines. Using information from the NTIA, CBO estimates that this would require four additional engineers and technicians, at an annual cost of about \$160,000 each; simulation software licenses, travel costs, and other miscellaneous expenses, at an annual cost of about \$100,000; and one-time equipment purchases for items such as a signal generator, a vector signal analyzer receiver, and a power amplifier for about \$500,000 in 2023. In total, CBO estimates that implementing the bill would cost \$4 million over the 2023–2028 period; spending would be subject to the availability of appropriated funds.

The bill also would require the ITS to study radio frequency emissions, determine spectrum propagation characteristics, and test technologies that enhance spectrum sharing between federal and nonfederal entities, among other activities. Because the ITS works on those activities under current law, CBO estimates that implementing those requirements would have no additional costs.

The CBO staff contact for this estimate is David Hughes. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.

PHILLIP L. SWAGEL,
Director, Congressional Budget Office.

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.

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 codify the Institute for Telecommunication Sciences within the National and Telecommunications and Information Administration Organization Act.

DUPLICATION OF FEDERAL PROGRAMS

Pursuant to clause 3(c)(5) of rule XIII, no provision of H.R. 1343 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.

RELATED COMMITTEE AND SUBCOMMITTEE HEARINGS

Pursuant to clause 3(c)(6) of rule XIII, the following related hearings were held:

The Subcommittee on Communications and Technology held a hearing on March 16, 2022. The hearing was entitled, “5G and Beyond: Exploring the Next Wireless Frontier.” The Subcommittee received testimony from the following witnesses:

- Scott Bergmann, Senior Vice President, Regulatory Affairs, CTIA;
- Mary L. Brown, Senior Director, Government Affairs, Cisco Systems, Inc.;
- Greg Guice, Director of Government Affairs, Public Knowledge;
- Jayne Stancavage, Global Executive Director for Product and Digital Infrastructure Policy, Intel Corporation; and
- Von Todd, Chief Executive of Corporate Strategy and Analytics, HTC Inc. and Director, Competitive Carriers Association Board of Directors.

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- Mark Gibson, Director, Business Development & Spectrum Policy, CommScope and Regulatory Officer of the OnGo Alliance;
- Anna M. Gomez, Partner, Wiley Rein LLP;
- Thomas E. Kadri, Ph.D., Assistant Professor, University of Georgia School of Law; and
- Alisa Valentin, Ph.D., Senior Director of Technology and Telecommunications, National Urban League.

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.

EARMARK, 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. 1343 contains no earmarks, limited tax benefits, or limited tariff benefits.

ADVISORY COMMITTEE STATEMENT

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

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.

SECTION-BY-SECTION ANALYSIS OF THE LEGISLATION

Section 1. Short title

Section 1 designates that the short title may be cited as the “Institute for Telecommunication Sciences Codification Act” or the “ITS Codification Act.”

Sec. 2. Institute for Telecommunication Sciences

Section 2 amends the NTIA Organization Act by providing additional statutory authority for ITS. This section requires ITS to serve as the primary laboratory for the executive branch of the federal government to, among other things, study radio frequency emissions, determine spectrum propagation characteristics, conduct tests on technology that enhances the sharing of electromagnetic spectrum between federal and non-federal users, and improve the interference tolerance of federal systems operating with, or using, federal spectrum. Section 2 also allows the head of ITS to enter into such agreements, including contracts, cooperative agreements, and interagency agreements as may be necessary to carry out these functions as provided under certain statutory authorities.

This section also requires the Assistant Secretary to establish an initiative to support emergency communication and tracking technologies for use in locating individuals trapped in areas where mo-

ble connectivity may not be available due to building collapses and natural disasters and submit a report to Congress on this effort.

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (new matter is printed in italics and existing law in which no change is proposed is shown in roman):

**NATIONAL TELECOMMUNICATIONS AND INFORMATION
ADMINISTRATION ORGANIZATION ACT**

* * * * *

**TITLE I—NATIONAL TELECOMMUNI-
CATIONS AND INFORMATION ADMIN-
ISTRATION**

PART A—ORGANIZATION AND FUNCTIONS

* * * * *

SEC. 106. INSTITUTE FOR TELECOMMUNICATION SCIENCES.

(a) *ESTABLISHMENT.*—

(1) *IN GENERAL.*—Under the authority provided to the Assistant Secretary under section 103, the Assistant Secretary shall operate a test center to be known as the Institute for Telecommunication Sciences (in this section referred to as “ITS”).

(2) *FUNCTIONS.*—

(A) *IN GENERAL.*—In addition to any functions delegated by the Assistant Secretary under subparagraph (B), ITS shall serve as the primary laboratory for the executive branch of the Federal Government to—

(i) study radio frequency emissions, including technologies and techniques to control such emissions and interference caused by such emissions;

(ii) determine spectrum propagation characteristics;

(iii) conduct tests on technology that enhances the sharing of electromagnetic spectrum between Federal and non-Federal users;

(iv) improve the interference tolerance of Federal systems operating with, or using, Federal spectrum;

(v) promote activities relating to access to Federal spectrum by non-Federal users and the sharing of Federal spectrum between Federal and non-Federal users; and

(vi) conduct such other activities as determined necessary by the Assistant Secretary.

(B) *ADDITIONAL FUNCTIONS.*—The Assistant Secretary may delegate to ITS any of the functions assigned to the Assistant Secretary under section 103(b)(1).

(3) *AGREEMENTS AND TRANSACTIONS.*—In carrying out the functions described in paragraph (2), the Assistant Secretary,

acting through the head of ITS, may enter into agreements as provided under the following authorities:

(A) Sections 11 and 12 of the Stevenson–Wylder Technology Innovation Act of 1980.

(B) Section 1535 of title 31, United States Code.

(C) Sections 207 and 209 of title 35, United States Code.

(D) Section 103(b)(2) of this Act.

(E) Section 113(g) of this Act.

(F) The first undesignated section of Public Law 91–412.

(G) As authorized in any other Federal statute.

(4) **FEDERAL SPECTRUM DEFINED.**—In this subsection, the term “Federal spectrum” means frequencies assigned on a primary basis to a Federal entity (as defined in section 113(l)).

(b) **EMERGENCY COMMUNICATION AND TRACKING TECHNOLOGIES INITIATIVE.**—

(1) **ESTABLISHMENT.**—The Assistant Secretary, acting through the head of ITS, shall establish an initiative to support the development of emergency communication and tracking technologies for use in locating trapped individuals in confined spaces, such as underground mines, and other shielded environments, such as high-rise buildings or collapsed structures, where conventional radio communication is limited.

(2) **ACTIVITIES.**—In order to carry out this subsection, the Assistant Secretary, acting through the head of ITS, shall work with private sector entities and the heads of appropriate Federal agencies, to—

(A) perform a needs assessment to identify and evaluate the measurement, technical specifications, and conformity assessment needs required to improve the operation and reliability of such emergency communication and tracking technologies; and

(B) support the development of technical specifications and conformance architecture to improve the operation and reliability of such emergency communication and tracking technologies.

(3) **REPORT.**—Not later than 18 months after the date of the enactment of this section, the Assistant Secretary shall submit to Congress, and make publicly available, a report on the assessment performed under paragraph (2)(A).

* * * * *