

Union Calendar No. 341

117TH CONGRESS
2^D SESSION

H. R. 4990

[Report No. 117-437]

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.

IN THE HOUSE OF REPRESENTATIVES

AUGUST 10, 2021

Mr. CARTER of Georgia introduced the following bill; which was referred to the Committee on Energy and Commerce

JULY 26, 2022

Additional sponsor: Mr. O'HALLERAN

JULY 26, 2022

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Strike out all after the enacting clause and insert the part printed in *italic*]

[For text of introduced bill, see copy of bill as introduced on August 10, 2021]

A BILL

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.

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

3 **SECTION 1. SHORT TITLE.**

4 *This Act may be cited as the “Institute for Tele-*
5 *communication Sciences Codification Act” or the “ITS*
6 *Codification Act”.*

7 **SEC. 2. INSTITUTE FOR TELECOMMUNICATION SCIENCES.**

8 *(a) FINDINGS.—Congress finds the following:*

9 *(1) The test center within National Tele-*
10 *communications and Information Administration (in*
11 *this subsection referred to as the “NTIA”)* represents
12 *executive branch agencies on spectrum issues before*
13 *the Federal Communications Commission.*

14 *(2) Understanding radio frequency propagation*
15 *characteristics and modeling is a critical component*
16 *of making spectrum decisions.*

17 *(3) Federal agencies rely on expert engineering*
18 *studies, simulations, and analyses to make determina-*
19 *tions about how to make spectrum available for com-*
20 *mercial use, including through system relocations and*
21 *identifying spectrum sharing opportunities through*
22 *the NTIA.*

23 *(4) Clearing of Federal spectrum, when feasible,*
24 *is the priority action to take to make Federal spec-*
25 *trum available for commercial uses as required by*

1 *section 113(j)(1) of the National Telecommunications*
2 *and Information Administration Organization Act*
3 *(47 U.S.C. 923(j)(1)).*

4 *(5) Sharing of Federal spectrum between Federal*
5 *entities and commercial entities provides access to*
6 *Federal spectrum for commercial uses in cir-*
7 *cumstances where clearing is not feasible.*

8 *(6) The test center within NTIA, is the Govern-*
9 *ment's premier expert laboratory for spectrum re-*
10 *search activities, spectrum sharing innovation and*
11 *testing, spectrum interference studies, and all activi-*
12 *ties related to advancing next generation wireless*
13 *technologies.*

14 *(7) The test center within NTIA is critical for*
15 *undertaking engineering studies and analyses that in-*
16 *form clearing or sharing opportunities and facilitate*
17 *policy decisions to maximize the efficient use of spec-*
18 *trum resources.*

19 *(b) OPERATION OF TEST CENTER.—Part A of the Na-*
20 *tional Telecommunications and Information Administra-*
21 *tion Organization Act (47 U.S.C. 901 et seq.) is amended*
22 *by adding at the end the following:*

23 **“SEC. 106. INSTITUTE FOR TELECOMMUNICATION**
24 **SCIENCES.**

25 **“(a) ESTABLISHMENT.—**

1 “(1) *IN GENERAL.*—Under the authority pro-
2 vided to the Assistant Secretary under section 103,
3 the Assistant Secretary shall operate a test center to
4 be known as the Institute for Telecommunication
5 Sciences (in this section referred to as ‘ITS’).

6 “(2) *FUNCTIONS.*—

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

12 “(i) study radio frequency emissions,
13 including technologies and techniques to
14 control such emissions and interference
15 caused by such emissions;

16 “(ii) determine spectrum propagation
17 characteristics;

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

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

1 “(v) promote activities relating to ac-
2 cess to Federal spectrum by non-Federal
3 users and the sharing of Federal spectrum
4 between Federal and non-Federal users; and

5 “(vi) conduct such other activities as
6 determined necessary by the Assistant Sec-
7 retary.

8 “(B) *ADDITIONAL FUNCTIONS.*—*The Assist-*
9 *ant Secretary may delegate to ITS any of the*
10 *functions assigned to the Assistant Secretary*
11 *under section 103(b)(1).*

12 “(3) *AGREEMENTS AND TRANSACTIONS.*—*The As-*
13 *stant Secretary, acting through the head of ITS,*
14 *may enter into such agreements, including contracts,*
15 *cooperative agreements, and interagency agreements,*
16 *as may be necessary to carry out the functions de-*
17 *scribed in paragraph (2).*

18 “(4) *FUNDS FROM FEDERAL AND NON-FEDERAL*
19 *ENTITIES.*—*In addition to such other sums as may be*
20 *made available to carry out this section, the Assistant*
21 *Secretary, acting through the head of ITS may ac-*
22 *cept, hold, administer, and use funds from any Fed-*
23 *eral entity or non-Federal entity, including a State*
24 *government, local government, or private sector enti-*

1 *ty, for ITS to perform analysis or conduct a technical*
2 *study on behalf of such entity.*

3 “(5) *FEDERAL SPECTRUM DEFINED.*—*In this*
4 *subsection, the term ‘Federal spectrum’ means fre-*
5 *quencies assigned on a primary basis to a Federal en-*
6 *tity (as defined in section 113(l) of the National Tele-*
7 *communications and Information Administration Or-*
8 *ganization Act (47 U.S.C. 923(l)).*

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

11 “(1) *ESTABLISHMENT.*—*The Assistant Secretary,*
12 *acting through the head of ITS, shall establish an ini-*
13 *tiative to support the development of emergency com-*
14 *munication and tracking technologies for use in locat-*
15 *ing trapped individuals in confined spaces, such as*
16 *underground mines, and other shielded environments,*
17 *such as high-rise buildings or collapsed structures,*
18 *where conventional radio communication is limited.*

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

23 “(A) *perform a needs assessment to identify*
24 *and evaluate the measurement, technical speci-*
25 *fications, and conformity assessment needs re-*

1 *quired to improve the operation and reliability*
2 *of such emergency communication and tracking*
3 *technologies; and*

4 *“(B) support the development of technical*
5 *specifications and conformance architecture to*
6 *improve the operation and reliability of such*
7 *emergency communication and tracking tech-*
8 *nologies.*

9 *“(3) REPORT.—Not later than 18 months after*
10 *the date of the enactment of this section, the Assistant*
11 *Secretary shall submit to Congress, and make pub-*
12 *licly available, a report on the assessment performed*
13 *under paragraph (2)(A).”.*

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