

.....
(Original Signature of Member)

119TH CONGRESS
1ST SESSION

H. R. 1455H

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

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

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”.

1 SEC. 2. INSTITUTE FOR TELECOMMUNICATION SCIENCES.

2 (a) FINDINGS.—Congress finds the following:

3 (1) The test center within the National Tele-
4 communications and Information Administration (in
5 ~~this subsection referred to as the “NTIA”) may, if so~~
~~requested by an rep-~~
6 ~~resents~~ executive branch agencyies , represent such agency
7 on spectrum issues
8 ~~before the Federal Communications Commission.~~

9 ~~(2) Understanding radio frequency propagation~~
10 ~~characteristics and modeling is a critical component~~
11 ~~of making spectrum decisions.~~

12 ~~(3) Federal agencies rely on expert engineering~~
13 ~~studies, simulations, and analyses to make deter-~~
14 ~~minations about how to make spectrum available for~~
15 ~~commercial use, including through system reloca-~~
16 ~~tions and identifying spectrum sharing opportunities~~
17 ~~through the NTIA.~~

18 ~~(4) Clearing of Federal spectrum, when fea-~~
19 ~~sible and determined to be in the public interest, is the~~
20 ~~priority action to take to make Federal~~
21 ~~spectrum available for commercial uses as required~~
22 ~~by section 113(j)(1) of the National Telecommuni-~~
23 ~~cations and Information Administration Organiza-~~
24 ~~tion Act (47 U.S.C. 923(j)(1)).~~

25 ~~(5) Sharing of Federal spectrum between Fed-~~
26 ~~eral entities and commercial entities provides access~~

2524 to Federal spectrum for commercial uses in cir-
2625 cumstances where clearing is not feasible.

1 (6) The test center within the NTIA is the Gov-
2 ernment’s premier expert laboratory for spectrum
3 [engineering](#) re-
4 search activities, spectrum sharing innovation and
5 testing, spectrum interference studies, and [all-spectrum](#)
6 [engineering](#) activi-
7 ties related to advancing next generation wireless
8 technologies.

9 (7) The test center within the NTIA is critical
10 for undertaking engineering studies and analyses
11 that inform clearing or sharing opportunities and fa-
12 cilitate policy decisions to maximize the efficient use
13 of spectrum resources, [which NTIA determines to be in the](#)
14 [public interest](#).

15 (b) OPERATION OF TEST CENTER.—Part A of the
16 National Telecommunications and Information Adminis-
17 tration Organization Act (47 U.S.C. 901 et seq.) is
18 amended by adding at the end the following:

19 “SEC. 106. INSTITUTE FOR TELECOMMUNICATION
20 SCIENCES.

21 “(a) ESTABLISHMENT.—

22 “(1) IN GENERAL.—Under the authority pro-
23 vided to the Assistant Secretary under section 103,
24 the Assistant Secretary shall operate a test center to
25 be known as the Institute for Telecommunication
26 Sciences (in this section referred to as ‘ITS’).

27 “(2) FUNCTIONS.—

1 “(A) IN GENERAL.—In addition to any
2 functions delegated by the Assistant Secretary
3 under subparagraph (B), ITS shall serve as ~~thea~~
4 primary laboratory for the executive branch of
5 the Federal Government to—

6 “(i) study radio frequency emissions,
7 including technologies and techniques to
8 control such emissions and interference
9 caused by such emissions;

10 “(ii) determine spectrum propagation
11 characteristics;

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

16 “(iv) improve the interference toler-
17 ance of Federal systems operating with, or
18 using, Federal spectrum;

19 “(v) promote activities relating to ac-
20 cess to Federal spectrum by non-Federal
21 users and the sharing of Federal spectrum
22 between Federal and non-Federal users;
23 and

1 “(vi) conduct such other activities as
2 determined necessary by the Assistant Sec-
3 retary.

4 ~~“(B) ADDITIONAL FUNCTIONS.—The As-~~
5 ~~sistant Secretary may delegate to ITS any of~~
6 ~~the functions assigned to the Assistant Sec-~~
7 ~~retary under section 103(b)(1).~~

8 4 ~~“(3) AGREEMENTS AND TRANSACTIONS.—In~~
9 5 ~~carrying out the functions described in paragraph~~
10 6 ~~(2), the Assistant Secretary, acting through the head~~
11 7 ~~of ITS, may enter into agreements as provided~~
12 8 ~~under the following authorities:~~

13 ~~“(A) Sections 11 and 12 of the Stevenson-~~
14 ~~Wydler Technology Innovation Act of 1980 (15~~
15 9 ~~U.S.C. 3710; 3710a).~~

16 10 ~~“(B) Section 1535 of title 31, United~~
17 11 ~~States Code.~~

18 ~~“(C) Sections 207 and 209 of title 35,~~
19 ~~United States Code.~~

20 ~~“(D) Section 103(b)(2) of this Act.~~

21 12 ~~“(E) Section 113(g) of this Act.~~

22 ~~“(F) The first undesignated section of~~
23 ~~Public Law 91-412.~~

24 ~~“(G) Any authorization in any other Fed-~~
25 13 ~~eral statute.~~

1 “(4) FEDERAL SPECTRUM DEFINED.—In this
2 subsection, the term ‘Federal spectrum’ means fre-
3 quencies assigned on a primary basis to a Federal
4 entity (as defined in section 113(l)).

5 “(b) EMERGENCY COMMUNICATION AND TRACKING
6 TECHNOLOGIES INITIATIVE.—

7 “(1) ESTABLISHMENT.—The Assistant Sec-
8 retary, acting through the head of ITS, shall ~~estab-~~
98 ~~lish an initiative to support~~ prepare a report on the
 development of
109 emergency communication and tracking technologies
110 for use in locating trapped individuals in confined
1211 spaces, such as underground mines, and other
1312 shielded environments, such as high-rise buildings or
1413 collapsed structures, where conventional radio com-
1514 munication is limited.

1615 “(2) ACTIVITIES.—In order to carry out this
1716 subsection, the Assistant Secretary, acting through
1817 the head of ITS, shall work with private sector enti-
1918 ties and the heads of appropriate Federal agencies,
2019 to—

2120 “(A) perform a needs assessment to iden-
2221 tify and evaluate the measurement, technical
2322 specifications, and conformity assessment needs that
 would be
2423 required to improve the operation and reliability

1 of such emergency communication and tracking
2 technologies; and

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

83 ~~“(3) REPORT.—Not later than 18 months after~~
94 ~~the date of the enactment of this section, the Assist-~~
105 ~~ant Secretary shall submit to Congress, and make~~
116 ~~publicly available, a report on the assessment per-~~
127 ~~formed under paragraph (2)(A).”.~~