

117TH CONGRESS
1ST SESSION

H. R. 4990

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

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 National Tele-
4 communications and Information Administration (in
5 this subsection referred to as the “NTIA”) rep-
6 resents executive branch agencies on spectrum issues
7 before the Federal Communications Commission.

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

11 (3) Federal agencies rely on expert engineering
12 studies, simulations, and analyses to make deter-
13 minations about system relocations to make spec-
14 trum available for commercial use as well as identify
15 spectrum sharing opportunities through the NTIA.

16 (4) Clearing of Federal spectrum, when fea-
17 sible, is the priority action to make Federal spec-
18 trum available for commercial uses.

19 (5) Sharing of Federal spectrum between Fed-
20 eral entities and commercial entities provides access
21 to Federal spectrum for commercial uses in cir-
22 cumstances where clearing is not possible.

23 (6) The test center within NTIA, is the Govern-
24 ment’s premier expert laboratory for spectrum re-
25 search activities, spectrum sharing innovation and
26 testing, spectrum interference studies, and all activi-

1 ties related to advancing next generation wireless
2 technologies.

3 (7) The test center within NTIA is critical for
4 undertaking engineering studies and analyses, iden-
5 tifying clearing or sharing opportunities, and facili-
6 tating policy decisions to maximize the efficient use
7 of spectrum resources.

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

12 **“SEC. 106. INSTITUTE FOR TELECOMMUNICATION**
13 **SCIENCES.**

14 “(a) ESTABLISHMENT.—

15 “(1) IN GENERAL.—Under the authority pro-
16 vided to the Assistant Secretary under section 103,
17 the Assistant Secretary shall operate a test center to
18 be known as the Institute for Telecommunication
19 Sciences (in this section referred to as ‘ITS’).

20 “(2) FUNCTIONS.—

21 “(A) IN GENERAL.—In addition to any
22 functions delegated by the Assistant Secretary
23 under subparagraph (B), ITS shall serve as the
24 primary laboratory for the Federal Government
25 to—

1 “(i) study radio frequency emissions,
2 including technologies and techniques to
3 control such emissions and interference
4 caused by such emissions;

5 “(ii) determine spectrum propagation
6 characteristics;

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

11 “(iv) improve the interference toler-
12 ance of Federal systems operating with, or
13 using, Federal spectrum;

14 “(v) promote activities relating to ac-
15 cess to Federal spectrum by non-Federal
16 users and the sharing of Federal spectrum
17 between Federal and non-Federal users;
18 and

19 “(vi) conduct such other activities as
20 determined necessary by the Assistant Sec-
21 retary.

22 “(B) ADDITIONAL FUNCTIONS.—The As-
23 sistant Secretary may delegate to ITS any of
24 the functions assigned to the Assistant Sec-
25 retary under section 103(b)(1).

1 “(3) AGREEMENTS AND TRANSACTIONS.—The
2 Assistant Secretary, acting through the head of ITS,
3 may enter into such agreements, including contracts,
4 cooperative agreements, and interagency agreements,
5 as may be necessary.

6 “(4) FUNDS FROM FEDERAL AND NON-FED-
7 ERAL ENTITIES.—In addition to such other sums as
8 may be made available to carry out this section, the
9 Assistant Secretary, acting through the head of ITS
10 may accept, hold, administer, and use funds from
11 any Federal entity or non-Federal entity, including
12 a State government, local government, or private
13 sector entity, for ITS to perform analysis or conduct
14 a technical study on behalf of such entity.

15 “(5) FEDERAL SPECTRUM DEFINED.—In this
16 subsection, the term ‘Federal spectrum’ means fre-
17 quencies assigned on a primary basis to a Federal
18 entity (as defined in section 113(l) of the National
19 Telecommunications and Information Administration
20 Organization Act (47 U.S.C. 923(l))).

21 “(b) EMERGENCY COMMUNICATION AND TRACKING
22 TECHNOLOGIES INITIATIVE.—

23 “(1) ESTABLISHMENT.—The Assistant Sec-
24 retary, acting through the head of ITS, shall estab-
25 lish an initiative to support the development of

1 emergency communication and tracking technologies
2 for use in locating trapped individuals in confined
3 spaces, such as underground mines, and other
4 shielded environments, such as high-rise buildings or
5 collapsed structures, where conventional radio com-
6 munication is limited.

7 “(2) ACTIVITIES.—In order to carry out this
8 subsection, the Assistant Secretary, acting through
9 the head of ITS, shall work with private sector enti-
10 ties and the heads of appropriate Federal agencies
11 to—

12 “(A) perform a needs assessment to iden-
13 tify and evaluate the measurement, technical
14 specifications, and conformity assessment needs
15 required to improve the operation and reliability
16 of such emergency communication and tracking
17 technologies; and

18 “(B) support the development of technical
19 specifications and conformance architecture to
20 improve the operation and reliability of such
21 emergency communication and tracking tech-
22 nologies.

23 “(3) REPORT.—Not later than 18 months after
24 the date of the enactment of this Act, the Assistant
25 Secretary shall submit to Congress, and make pub-

- 1 licly available, a report on the assessment performed
- 2 under paragraph (2)(A).”.

