

118TH CONGRESS
1ST SESSION

H. R. 1343

IN THE SENATE OF THE UNITED STATES

APRIL 26, 2023

Received; read twice and referred to the Committee on Commerce, Science,
and Transportation

AN ACT

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 the National Tele-

10 communications and Information Administration (in

11 this subsection referred to as the “NTIA”) rep-

12 resents executive branch agencies on spectrum issues

13 before 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 deter-

19 minations about how to make spectrum available for

20 commercial use, including through system reloca-

21 tions and identifying spectrum sharing opportunities

22 through the NTIA.

23 (4) Clearing of Federal spectrum, when fea-

24 sible, is the priority action to take to make Federal

25 spectrum available for commercial uses as required

1 by section 113(j)(1) of the National Telecommuni-
2 cations and Information Administration Organiza-
3 tion Act (47 U.S.C. 923(j)(1)).

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

8 (6) The test center within the NTIA is the Gov-
9 ernment’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 the NTIA is critical
15 for undertaking engineering studies and analyses
16 that inform clearing or sharing opportunities and fa-
17 cilitate policy decisions to maximize the efficient use
18 of spectrum resources.

19 (b) OPERATION OF TEST CENTER.—Part A of the
20 National Telecommunications and Information Adminis-
21 tration Organization Act (47 U.S.C. 901 et seq.) is
22 amended 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 toler-
23 ance of Federal systems operating with, or
24 using, 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;
5 and

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

9 “(B) ADDITIONAL FUNCTIONS.—The As-
10 sistant Secretary may delegate to ITS any of
11 the functions assigned to the Assistant Sec-
12 retary under section 103(b)(1).

13 “(3) AGREEMENTS AND TRANSACTIONS.—In
14 carrying out the functions described in paragraph
15 (2), the Assistant Secretary, acting through the head
16 of ITS, may enter into agreements as provided
17 under the following authorities:

18 “(A) Sections 11 and 12 of the Stevenson–
19 Wydler Technology Innovation Act of 1980.

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

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

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

25 “(E) Section 113(g) of this Act.

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

3 “(G) As authorized in any other Federal
4 statute.

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

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

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

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

