

118TH CONGRESS
2D SESSION

S. 3781

To amend the National Telecommunications and Information Administration Organization Act to codify the Institute for Telecommunication Sciences, 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 SENATE OF THE UNITED STATES

FEBRUARY 8 (legislative day, FEBRUARY 7), 2024

Ms. DUCKWORTH (for herself and Mrs. BLACKBURN) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To amend the National Telecommunications and Information Administration Organization Act to codify the Institute for Telecommunication Sciences, 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,*

1 **SECTION 1. SHORT TITLE.**

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

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

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

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

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

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

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

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

5 (6) The test center within the NTIA is the Fed-
 6 eral Government's premier expert laboratory for
 7 spectrum research activities, spectrum sharing inno-
 8 vation and testing, spectrum interference studies,
 9 and all activities related to advancing next genera-
 10 tion wireless technologies.

11 (7) The test center within the NTIA is critical
 12 for undertaking engineering studies and analyses
 13 that inform clearing or sharing opportunities and fa-
 14 cilitate policy decisions to maximize the efficient use
 15 of spectrum resources.

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

20 **“SEC. 106. INSTITUTE FOR TELECOMMUNICATION**
 21 **SCIENCES.**

22 “(a) ESTABLISHMENT.—

23 “(1) DEFINITION.—In this subsection, the term
 24 ‘Federal spectrum’ means frequencies assigned on a

1 primary basis to a Federal entity, as defined in sec-
2 tion 113(l).

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

8 “(3) FUNCTIONS.—

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

14 “(i) study radio frequency emissions,
15 including technologies and techniques to
16 control those emissions and interference
17 caused by those emissions;

18 “(ii) determine spectrum propagation
19 characteristics;

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

1 “(iv) improve the interference toler-
2 ance of Federal systems operating with, or
3 using, Federal spectrum;

4 “(v) promote activities relating to ac-
5 cess to Federal spectrum by non-Federal
6 users and the sharing of Federal spectrum
7 between Federal and non-Federal users;
8 and

9 “(vi) conduct such other activities de-
10 termined necessary by the Assistant Sec-
11 retary.

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

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

21 “(A) Sections 11 and 12 of the Stevenson–
22 Wydler Technology Innovation Act of 1980 (15
23 U.S.C. 3710, 3710a).

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

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

3 “(D) Section 103(b)(2) of this Act.

4 “(E) Section 113(g) of this Act.

5 “(F) The first undesignated section of the
6 Act entitled ‘An Act to authorize the Depart-
7 ment of Commerce to make special studies, to
8 provide services, and to engage in joint projects,
9 and for other purposes’, approved September
10 25, 1970 (Public Law 91–412).

11 “(G) As authorized in any other provision
12 of Federal law.

13 “(b) EMERGENCY COMMUNICATION AND TRACKING
14 TECHNOLOGIES INITIATIVE.—

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

24 “(2) ACTIVITIES.—In order to carry out this
25 subsection, the Assistant Secretary, acting through

1 the head of ITS, shall work with private sector enti-
2 ties and the heads of appropriate Federal agencies
3 to—

4 “(A) perform a needs assessment to iden-
5 tify and evaluate the measurement, technical
6 specifications, and conformity assessment needs
7 required to improve the operation and reliability
8 of emergency communication and tracking tech-
9 nologies described in paragraph (1); and

10 “(B) support the development of technical
11 specifications and conformance architecture to
12 improve the operation and reliability of emer-
13 gency communication and tracking technologies
14 described in paragraph (1).

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

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