

**AMENDMENT IN THE NATURE OF A SUBSTITUTE
TO H.R. 4990
OFFERED BY MR. O'HALLERAN OF ARIZONA**

Strike all after the enacting clause and insert the following:

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 National Tele-
8 communications and Information Administration (in
9 this subsection referred to 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-

1 tions and identifying spectrum sharing opportunities
2 through the NTIA.

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

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

13 (6) The test center within NTIA, is the Govern-
14 ment's premier expert laboratory for spectrum re-
15 search activities, spectrum sharing innovation and
16 testing, spectrum interference studies, and all activi-
17 ties related to advancing next generation wireless
18 technologies.

19 (7) The test center within NTIA is critical for
20 undertaking engineering studies and analyses that
21 inform clearing or sharing opportunities and facili-
22 tate policy decisions to maximize the efficient use of
23 spectrum resources.

24 (b) OPERATION OF TEST CENTER.—Part A of the
25 National Telecommunications and Information Adminis-

1 tration Organization Act (47 U.S.C. 901 et seq.) is
2 amended by adding at the end the following:

3 **“SEC. 106. INSTITUTE FOR TELECOMMUNICATION**
4 **SCIENCES.**

5 “(a) ESTABLISHMENT.—

6 “(1) IN GENERAL.—Under the authority pro-
7 vided to the Assistant Secretary under section 103,
8 the Assistant Secretary shall operate a test center to
9 be known as the Institute for Telecommunication
10 Sciences (in this section referred to as ‘ITS’).

11 “(2) FUNCTIONS.—

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

17 “(i) study radio frequency emissions,
18 including technologies and techniques to
19 control such emissions and interference
20 caused by such emissions;

21 “(ii) determine spectrum propagation
22 characteristics;

23 “(iii) conduct tests on technology that
24 enhances the sharing of electromagnetic

1 spectrum between Federal and non-Federal
2 users;

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

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

11 “(vi) conduct such other activities as
12 determined necessary by the Assistant Sec-
13 retary.

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

18 “(3) AGREEMENTS AND TRANSACTIONS.—The
19 Assistant Secretary, acting through the head of ITS,
20 may enter into such agreements, including contracts,
21 cooperative agreements, and interagency agreements,
22 as may be necessary to carry out the functions de-
23 scribed in paragraph (2).

24 “(4) FUNDS FROM FEDERAL AND NON-FED-
25 ERAL ENTITIES.—In addition to such other sums as

1 may be made available to carry out this section, the
2 Assistant Secretary, acting through the head of ITS
3 may accept, hold, administer, and use funds from
4 any Federal entity or non-Federal entity, including
5 a State government, local government, or private
6 sector entity, for ITS to perform analysis or conduct
7 a technical study on behalf of such entity.

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

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

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

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

6 “(A) perform a needs assessment to iden-
7 tify and evaluate the measurement, technical
8 specifications, and conformity assessment needs
9 required to improve the operation and reliability
10 of such emergency communication and tracking
11 technologies; and

12 “(B) support the development of technical
13 specifications and conformance architecture to
14 improve the operation and reliability of such
15 emergency communication and tracking tech-
16 nologies.

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

