

**Union Calendar No. 8**

103D CONGRESS  
1ST SESSION

**H. R. 707**

**[Report No. 103-19]**

---

---

**A BILL**

To establish procedures to improve the allocation and assignment of the electromagnetic spectrum, and for other purposes.

---

---

FEBRUARY 24, 1993

Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

## Union Calendar No. 8

103<sup>D</sup> CONGRESS  
1<sup>ST</sup> SESSION

# H. R. 707

**[Report No. 103-19]**

To establish procedures to improve the allocation and assignment of the electromagnetic spectrum, and for other purposes.

---

### IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 2, 1993

Mr. DINGELL (for himself and Mr. MARKEY) introduced the following bill;  
which was referred to the Committee on Energy and Commerce

FEBRUARY 24, 1993

Committed to the Committee of the Whole House on the State of the Union  
and ordered to be printed

---

## A BILL

To establish procedures to improve the allocation and assignment of the electromagnetic spectrum, 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 “Emerging Tele-  
5 communications Technologies Act of 1993”.

1 **SEC. 2. AMENDMENT TO THE NATIONAL TELECOMMUNI-**  
2 **CATIONS AND INFORMATION ADMINISTRA-**  
3 **TION ORGANIZATION ACT.**

4 The National Telecommunications and Information  
5 Administration Organization Act is amended—

6 (1) by redesignating part B as part C; and

7 (2) by inserting after part A the following new  
8 part:

9 **“PART B—EMERGING TELECOMMUNICATIONS**  
10 **TECHNOLOGIES**

11 **“SEC. 111. FINDINGS.**

12 “The Congress finds that—

13 “(1) the Federal Government currently reserves  
14 for its own use, or has priority of access to, approxi-  
15 mately 40 percent of the electromagnetic spectrum  
16 that is assigned for use pursuant to the Communica-  
17 tions Act of 1934;

18 “(2) many of such frequencies are underutilized  
19 by Federal Government licensees;

20 “(3) the public interest requires that many of  
21 such frequencies be utilized more efficiently by Fed-  
22 eral Government and non-Federal licensees;

23 “(4) additional frequencies are assigned for  
24 services that could be obtained more efficiently from  
25 commercial carriers or other vendors;

1           “(5) scarcity of assignable frequencies for li-  
2           censing by the Commission can and will—

3           “(A) impede the development and commer-  
4           cialization of new telecommunications products  
5           and services;

6           “(B) limit the capacity and efficiency of  
7           the United States telecommunications systems;

8           “(C) prevent some State and local police,  
9           fire, and emergency services from obtaining ur-  
10          gently needed radio channels; and

11          “(D) adversely affect the productive capac-  
12          ity and international competitiveness of the  
13          United States economy;

14          “(6) a reassignment of these frequencies can  
15          produce significant economic returns; and

16          “(7) the Secretary of Commerce, the President,  
17          and the Federal Communications Commission should  
18          be directed to take appropriate steps to correct these  
19          deficiencies.

20       **“SEC. 112. NATIONAL SPECTRUM PLANNING.**

21          “(a) **PLANNING ACTIVITIES.**—The Assistant Sec-  
22          retary and the Chairman of the Commission shall meet,  
23          at least biannually, to conduct joint spectrum planning  
24          with respect to the following issues—

1           “(1) the future spectrum requirements for pub-  
2           lic and private uses, including State and local gov-  
3           ernment public safety agencies;

4           “(2) the spectrum allocation actions necessary  
5           to accommodate those uses; and

6           “(3) actions necessary to promote the efficient  
7           use of the spectrum, including spectrum manage-  
8           ment techniques to promote increased shared use of  
9           the spectrum that does not cause harmful inter-  
10          ference as a means of increasing commercial access.

11          “(b) REPORTS.—The Assistant Secretary and the  
12          Chairman of the Commission shall submit a joint annual  
13          report to the Committee on Energy and Commerce of the  
14          House of Representatives, the Committee on Commerce,  
15          Science, and Transportation of the Senate, the Secretary,  
16          and the Commission on the joint spectrum planning activi-  
17          ties conducted under subsection (a) and recommendations  
18          for action developed pursuant to such activities.

19          “(c) REPORTING REQUIREMENTS.—The first annual  
20          report submitted after the date of the report by the advi-  
21          sory committee under section 113(d)(4) shall—

22                 “(1) include an analysis of and response to that  
23                 committee report; and

24                 “(2) include an analysis of the effect on spec-  
25                 trum efficiency and the cost of equipment to Federal

1 spectrum users of maintaining separate allocations  
2 for Federal Government and non-Federal Govern-  
3 ment licensees for the same or similar services.

4 **“SEC. 113. IDENTIFICATION OF REALLOCABLE FRE-**  
5 **QUENCIES.**

6 “(a) IDENTIFICATION REQUIRED.—The Secretary  
7 shall, within 24 months after the date of the enactment  
8 of this part, prepare and submit to the President and the  
9 Congress a report identifying bands of frequencies that—

10 “(1) are allocated on a primary basis for Fed-  
11 eral Government use and eligible for licensing pursu-  
12 ant to section 305(a) of the Act (47 U.S.C. 305(a));

13 “(2) are not required for the present or identifi-  
14 able future needs of the Federal Government;

15 “(3) can feasibly be made available, as of the  
16 date of submission of the report or at any time dur-  
17 ing the next 15 years, for use under the Act (other  
18 than for Federal Government stations under such  
19 section 305);

20 “(4) will not result in costs to the Federal Gov-  
21 ernment, or losses of services or benefits to the pub-  
22 lic, that are excessive in relation to the benefits that  
23 may be obtained by non-Federal licensees; and

1           “(5) are most likely to have the greatest poten-  
2           tial for productive uses and public benefits under the  
3           Act.

4           “(b) MINIMUM AMOUNT OF SPECTRUM REC-  
5           COMMENDED.—

6           “(1) IN GENERAL.—Based on the report re-  
7           quired by subsection (a), the Secretary shall rec-  
8           ommend for reallocation, for use other than by Fed-  
9           eral Government stations under section 305 of the  
10          Act (47 U.S.C. 305), bands of frequencies that span  
11          a total of not less than 200 megahertz, that are lo-  
12          cated below 6 gigahertz, and that meet the criteria  
13          specified in paragraphs (1) through (4) of subsection  
14          (a). The Secretary may not include, in such 200  
15          megahertz, bands of frequencies that span more  
16          than 20 megahertz and that are located between 5  
17          and 6 gigahertz. If the report identifies (as meeting  
18          such criteria) bands of frequencies spanning more  
19          than 200 megahertz, the report shall identify and  
20          recommend for reallocation those bands (spanning  
21          not less than 200 megahertz) that meet the criteria  
22          specified in paragraph (5) of such subsection.

23          “(2) MIXED USES PERMITTED TO BE COUNT-  
24          ED.—Bands of frequencies which the Secretary’s re-  
25          port recommends be partially retained for use by

1 Federal Government stations, but which are also  
2 recommended to be reallocated to be made available  
3 under the Act for use by non-Federal stations, may  
4 be counted toward the minimum spectrum required  
5 by paragraph (1) of this subsection, except that—

6 “(A) the bands of frequencies counted  
7 under this paragraph may not count toward  
8 more than one-half of the minimum required by  
9 paragraph (1) of this subsection;

10 “(B) a band of frequencies may not be  
11 counted under this paragraph unless the assign-  
12 ments of the band to Federal Government sta-  
13 tions under section 305 of the Act (47 U.S.C.  
14 305) are limited by geographic area, by time, or  
15 by other means so as to guarantee that the po-  
16 tential use to be made by such Federal Govern-  
17 ment stations is substantially less (as measured  
18 by geographic area, time, or otherwise) than the  
19 potential use to be made by non-Federal sta-  
20 tions; and

21 “(C) the operational sharing permitted  
22 under this paragraph shall be subject to coordi-  
23 nation procedures which the Commission shall  
24 establish and implement to ensure against  
25 harmful interference.

1 “(c) CRITERIA FOR IDENTIFICATION.—

2 “(1) NEEDS OF THE FEDERAL GOVERNMENT.—

3 In determining whether a band of frequencies meets  
4 the criteria specified in subsection (a)(2), the Sec-  
5 retary shall—

6 “(A) consider whether the band of fre-  
7 quencies is used to provide a communications  
8 service that is or could be available from a com-  
9 mercial carrier or other vendor;

10 “(B) seek to promote—

11 “(i) the maximum practicable reliance  
12 on commercially available substitutes;

13 “(ii) the sharing of frequencies (as  
14 permitted under subsection (b)(2));

15 “(iii) the development and use of new  
16 communications technologies; and

17 “(iv) the use of nonradiating commu-  
18 nications systems where practicable; and

19 “(C) seek to avoid—

20 “(i) serious degradation of Federal  
21 Government services and operations; and

22 “(ii) excessive costs to the Federal  
23 Government and users of Federal Govern-  
24 ment services.

1           “(2) FEASIBILITY OF USE.—In determining  
2 whether a frequency band meets the criteria speci-  
3 fied in subsection (a)(3), the Secretary shall—

4           “(A) assume such frequencies will be as-  
5 signed by the Commission under section 303 of  
6 the Act (47 U.S.C. 303) over the course of not  
7 less than 15 years;

8           “(B) assume reasonable rates of scientific  
9 progress and growth of demand for tele-  
10 communications services;

11           “(C) determine the extent to which the  
12 reallocation or reassignment will relieve actual  
13 or potential scarcity of frequencies available for  
14 licensing by the Commission for non-Federal  
15 use;

16           “(D) seek to include frequencies which can  
17 be used to stimulate the development of new  
18 technologies; and

19           “(E) consider the immediate and recurring  
20 costs to reestablish services displaced by the  
21 reallocation of spectrum.

22           “(3) ANALYSIS OF BENEFITS.—In determining  
23 whether a band of frequencies meets the criteria  
24 specified in subsection (a)(4), the Secretary shall  
25 consider—

1           “(A) the extent to which equipment is or  
2 will be available that is capable of utilizing the  
3 band;

4           “(B) the proximity of frequencies that are  
5 already assigned for commercial or other non-  
6 Federal use; and

7           “(C) the activities of foreign governments  
8 in making frequencies available for experimen-  
9 tation or commercial assignments in order to  
10 support their domestic manufacturers of equip-  
11 ment.

12           “(4) POWER AGENCY FREQUENCIES.—

13           “(A) ELIGIBLE FOR MIXED USE ONLY.—  
14 The frequencies assigned to any Federal power  
15 agency may only be eligible for mixed use under  
16 subsection (b)(2) in geographically separate  
17 areas and shall not be recommended for the  
18 purposes of withdrawing that assignment. In  
19 any case where a frequency is to be shared by  
20 an affected Federal power agency and a non-  
21 Federal user, such use by the non-Federal user  
22 shall, consistent with the procedures established  
23 under subsection (b)(2)(C), not cause harmful  
24 interference to the affected Federal power agen-

1 cy or adversely affect the reliability of its power  
2 system.

3 “(B) DEFINITION.—As used in this para-  
4 graph, the term ‘Federal power agency’ means  
5 the Tennessee Valley Authority, the Bonneville  
6 Power Administration, the Western Area Power  
7 Administration, or the Southwestern Power  
8 Administration.

9 “(d) PROCEDURE FOR IDENTIFICATION OF  
10 REALLOCABLE BANDS OF FREQUENCIES.—

11 “(1) SUBMISSION OF PRELIMINARY IDENTIFICA-  
12 TION TO CONGRESS.—Within 12 months after the  
13 date of the enactment of this part, the Secretary  
14 shall prepare and submit to the Congress a report  
15 which makes a preliminary identification of  
16 reallocable bands of frequencies which meet the cri-  
17 teria established by this section.

18 “(2) CONVENING OF ADVISORY COMMITTEE.—  
19 Not later than the date the Secretary submits the  
20 report required by paragraph (1), the Secretary shall  
21 convene an advisory committee to—

22 “(A) review the bands of frequencies iden-  
23 tified in such report;

24 “(B) advise the Secretary with respect to  
25 (i) the bands of frequencies which should be in-

1           cluded in the final report required by subsection  
2           (a), and (ii) the effective dates which should be  
3           established under subsection (e) with respect to  
4           such frequencies;

5           “(C) receive public comment on the Sec-  
6           retary’s report and on the final report; and

7           “(D) prepare and submit the report re-  
8           quired by paragraph (4).

9           The advisory committee shall meet at least monthly  
10          until each of the actions required by section 114(a)  
11          have taken place.

12          “(3) COMPOSITION OF COMMITTEE; CHAIR-  
13          MAN.—The advisory committee shall include—

14                 “(A) the Chairman of the Commission and  
15                 the Assistant Secretary, and one other rep-  
16                 resentative of the Federal Government as des-  
17                 ignated by the Secretary; and

18                 “(B) representatives of—

19                         “(i) United States manufacturers of  
20                         spectrum-dependent telecommunications  
21                         equipment;

22                         “(ii) commercial carriers;

23                         “(iii) other users of the electro-  
24                         magnetic spectrum, including radio and  
25                         television broadcast licensees, State and

1 local public safety agencies, and the avia-  
2 tion industry; and

3 “(iv) other interested members of the  
4 public who are knowledgeable about the  
5 uses of the electromagnetic spectrum.

6 A majority of the members of the committee shall be  
7 members described in subparagraph (B), and one of  
8 such members shall be designated as chairman by  
9 the Secretary.

10 “(4) RECOMMENDATIONS ON SPECTRUM ALLO-  
11 CATION PROCEDURES.—The advisory committee  
12 shall, not later than 36 months after the date of the  
13 enactment of this part, submit to the Secretary, the  
14 Commission, the Committee on Energy and Com-  
15 merce of the House of Representatives, and the  
16 Committee on Commerce, Science, and Transpor-  
17 tation of the Senate, a report containing such rec-  
18 ommendations as the advisory committee considers  
19 appropriate for the reform of the process of allocat-  
20 ing the electromagnetic spectrum between Federal  
21 and non-Federal use, and any dissenting views  
22 thereon.

23 “(e) TIMETABLE FOR REALLOCATION AND LIMITA-  
24 TION.—

1           “(1) TIMETABLE REQUIRED.—The Secretary  
2 shall, as part of the report required by subsection  
3 (a), include a timetable that recommends immediate  
4 and delayed effective dates by which the President  
5 shall withdraw or limit assignments on the fre-  
6 quencies specified in the report.

7           “(2) EXPEDITED REALLOCATION OF INITIAL 30  
8 MHZ PERMITTED.—The Secretary may prepare and  
9 submit to the President a report which specifically  
10 identifies an initial 30 megahertz of spectrum that  
11 meets the criteria described in subsection (a) and  
12 that can be made available for reallocation imme-  
13 diately upon issuance of the report required by this  
14 section.

15           “(3) DELAYED EFFECTIVE DATE.—The rec-  
16 ommended delayed effective dates shall—

17                   “(A) permit the earliest possible  
18 reallocation of the frequency bands, taking into  
19 account the requirements of section 115(1);

20                   “(B) be based on the useful remaining life  
21 of equipment that has been purchased or con-  
22 tracted for to operate on identified frequencies;

23                   “(C) be based on the need to coordinate  
24 frequency use with other nations; and

1           “(D) take into account the relationship be-  
2           tween the costs to the Federal Government of  
3           changing to different frequencies and the bene-  
4           fits that may be obtained from commercial and  
5           other non-Federal uses of the reassigned fre-  
6           quencies.

7   **“SEC. 114. WITHDRAWAL OF ASSIGNMENT TO FEDERAL**  
8           **GOVERNMENT STATIONS.**

9           “(a) IN GENERAL.—The President shall—

10           “(1) within 6 months after receipt of the Sec-  
11           retary’s report under section 113(a), withdraw the  
12           assignment to a Federal Government station of any  
13           frequency which the report recommends for imme-  
14           diate reallocation;

15           “(2) within such 6-month period, limit the as-  
16           signment to a Federal Government station of any  
17           frequency which the report recommends be made im-  
18           mediately available for mixed use under section  
19           113(b)(2);

20           “(3) by the delayed effective date recommended  
21           by the Secretary under section 113(e) (except as  
22           provided in subsection (b)(4) of this section), with-  
23           draw or limit the assignment to a Federal Govern-  
24           ment station of any frequency which the report rec-

1       ommends be reallocated or made available for mixed  
2       use on such delayed effective date;

3           “(4) assign or reassign other frequencies to  
4       Federal Government stations as necessary to adjust  
5       to such withdrawal or limitation of assignments; and

6           “(5) transmit a notice and description to the  
7       Commission and each House of Congress of the ac-  
8       tions taken under this subsection.

9       “(b) EXCEPTIONS.—

10           “(1) AUTHORITY TO SUBSTITUTE.—If the  
11       President determines that a circumstance described  
12       in paragraph (2) exists, the President—

13           “(A) may substitute an alternative fre-  
14       quency or band of frequencies for the frequency  
15       or band that is subject to such determination  
16       and withdraw (or limit) the assignment of that  
17       alternative frequency or band in the manner re-  
18       quired by subsection (a); and

19           “(B) shall submit a statement of the rea-  
20       sons for taking the action described in subpara-  
21       graph (A) to the Committee on Energy and  
22       Commerce of the House of Representatives and  
23       the Committee on Commerce, Science, and  
24       Transportation of the Senate.

1           “(2) GROUNDS FOR SUBSTITUTION.—For pur-  
2           poses of paragraph (1), the following circumstances  
3           are described in this paragraph:

4                   “(A) the reassignment would seriously  
5                   jeopardize the national defense interests of the  
6                   United States;

7                   “(B) the frequency proposed for reassign-  
8                   ment is uniquely suited to meeting important  
9                   governmental needs;

10                   “(C) the reassignment would seriously  
11                   jeopardize public health or safety; or

12                   “(D) the reassignment will result in costs  
13                   to the Federal Government that are excessive in  
14                   relation to the benefits that may be obtained  
15                   from commercial or other non-Federal uses of  
16                   the reassigned frequency.

17           “(3) CRITERIA FOR SUBSTITUTED FRE-  
18           QUENCIES.—For purposes of paragraph (1), a fre-  
19           quency may not be substituted for a frequency iden-  
20           tified by the report of the Secretary under section  
21           113(a) unless the substituted frequency also meets  
22           each of the criteria specified by section 113(a).

23           “(4) DELAYS IN IMPLEMENTATION.—If the  
24           President determines that any action cannot be com-  
25           pleted by the delayed effective date recommended by

1 the Secretary pursuant to section 113(e), or that  
2 such an action by such date would result in a fre-  
3 quency being unused as a consequence of the Com-  
4 mission's plan under section 115, the President  
5 may—

6 “(A) withdraw or limit the assignment to  
7 Federal Government stations on a later date  
8 that is consistent with such plan, except that  
9 the President shall notify each committee speci-  
10 fied in paragraph (1)(B) and the Commission  
11 of the reason that withdrawal or limitation at  
12 a later date is required; or

13 “(B) substitute alternative frequencies pur-  
14 suant to the provisions of this subsection.

15 “(c) LIMITATION ON DELEGATION.—Notwithstand-  
16 ing any other provision of law, the authorities and duties  
17 established by this section may not be delegated.

18 **“SEC. 115. DISTRIBUTION OF FREQUENCIES BY THE COM-**  
19 **MISSION.**

20 Not later than 1 year after the President notifies the  
21 Commission pursuant to section 114(a)(5), the Commis-  
22 sion shall prepare, in consultation with the Assistant Sec-  
23 retary when necessary, and submit to the President and  
24 the Congress, a plan for the distribution under the Act

1 of the frequency bands reallocated pursuant to the re-  
2 quirements of this part. Such plan shall—

3 “(1) not propose the immediate distribution of  
4 all such frequencies, but, taking into account the  
5 timetable recommended by the Secretary pursuant to  
6 section 113(e), shall propose—

7 “(A) gradually to distribute the frequencies  
8 remaining, after making the reservation re-  
9 quired by subparagraph (B), over the course of  
10 a period of not less than 10 years beginning on  
11 the date of submission of such plan; and

12 “(B) to reserve a significant portion of  
13 such frequencies for distribution beginning after  
14 the end of such 10-year period;

15 “(2) contain appropriate provisions to ensure—

16 “(A) the availability of frequencies for new  
17 technologies and services in accordance with the  
18 policies of section 7 of the Act (47 U.S.C. 157);  
19 and

20 “(B) the availability of frequencies to stim-  
21 ulate the development of such technologies;

22 “(3) address (A) the feasibility of reallocating  
23 spectrum from current commercial and other non-  
24 Federal uses to provide for more efficient use of the  
25 spectrum, and (B) innovation and marketplace de-

1 velopments that may affect the relative efficiencies  
2 of different spectrum allocations; and

3 “(4) not prevent the Commission from allocat-  
4 ing bands of frequencies for specific uses in future  
5 rulemaking proceedings.

6 **“SEC. 116. AUTHORITY TO RECOVER REASSIGNED FRE-**  
7 **QUENCIES.**

8 “(a) **AUTHORITY OF PRESIDENT.**—Subsequent to the  
9 withdrawal of assignment to Federal Government stations  
10 pursuant to section 114, the President may reclaim reas-  
11 signed frequencies for reassignment to Federal Govern-  
12 ment stations in accordance with this section.

13 “(b) **PROCEDURE FOR RECLAIMING FRE-**  
14 **QUENCIES.**—

15 “(1) **UNALLOCATED FREQUENCIES.**—If the fre-  
16 quencies to be reclaimed have not been allocated or  
17 assigned by the Commission pursuant to the Act,  
18 the President shall follow the procedures for substi-  
19 tution of frequencies established by section 114(b) of  
20 this part.

21 “(2) **ALLOCATED FREQUENCIES.**—If the fre-  
22 quencies to be reclaimed have been allocated or as-  
23 signed by the Commission, the President shall follow  
24 the procedures for substitution of frequencies estab-  
25 lished by section 114(b) of this part, except that the

1 notification required by section 114(b)(1)(A) shall  
2 include—

3 “(A) a timetable to accommodate an or-  
4 derly transition for licensees to obtain new fre-  
5 quencies and equipment necessary for its utili-  
6 zation; and

7 “(B) an estimate of the cost of displacing  
8 spectrum users licensed by the Commission.

9 “(c) COSTS OF RECLAIMING FREQUENCIES; APPRO-  
10 PRIATIONS AUTHORIZED.—The Federal Government shall  
11 bear all costs of reclaiming frequencies pursuant to this  
12 section, including the cost of equipment which is rendered  
13 unusable, the cost of relocating operations to a different  
14 frequency band, and any other costs that are directly at-  
15 tributable to the reclaiming of the frequency pursuant to  
16 this section. There are authorized to be appropriated such  
17 sums as may be necessary to carry out the purposes of  
18 this section.

19 “(d) EFFECTIVE DATE OF RECLAIMED FRE-  
20 QUENCIES.—The Commission shall not withdraw licenses  
21 for any reclaimed frequencies until the end of the fiscal  
22 year following the fiscal year in which the President’s noti-  
23 fication is received.

24 “(e) EFFECT ON OTHER LAW.—Nothing in this sec-  
25 tion shall be construed to limit or otherwise affect the au-

1 thority of the President under sections 305 and 706 of  
2 the Act (47 U.S.C. 305, 606).

3 **“SEC. 117. DEFINITIONS.**

4 As used in this part:

5 “(1) The term ‘allocation’ means an entry in  
6 the National Table of Frequency Allocations of a  
7 given frequency band for the purpose of its use by  
8 one or more radiocommunication services.

9 “(2) The term ‘assignment’ means an author-  
10 ization given to a station licensee to use specific fre-  
11 quencies or channels.

12 “(3) The term ‘commercial carrier’ means any  
13 entity that uses a facility licensed by the Federal  
14 Communications Commission pursuant to the Com-  
15 munications Act of 1934 for hire or for its own use,  
16 but does not include Federal Government stations li-  
17 censed pursuant to section 305 of the Act (47  
18 U.S.C. 305).

19 “(4) The term ‘the Act’ means the Communica-  
20 tions Act of 1934 (47 U.S.C. 151 et seq.).”.

HR 707 RH—2

HR 707 RH—3