

113TH CONGRESS
2D SESSION

S. 2473

To reallocate Federal Government-held spectrum for commercial use, to promote wireless innovation and enhance wireless communications, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JUNE 12, 2014

Mr. RUBIO introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To reallocate Federal Government-held spectrum for commercial use, to promote wireless innovation and enhance wireless communications, 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; TABLE OF CONTENTS.**

4 (a) IN GENERAL.—This Act may be cited as the
5 “Wireless Innovation Act of 2014”.

6 (b) TABLE OF CONTENTS.—The table of contents for
7 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings; statement of policy.
- Sec. 3. Definitions.
- Sec. 4. Reallocation of Federal Government spectrum.

- Sec. 5. Spectrum pipeline.
- Sec. 6. Reallocation incentive.
- Sec. 7. Expediting routine secondary market transactions.
- Sec. 8. Analysis of spectrum requirements.
- Sec. 9. Federal spectrum transparency and value.

1 **SEC. 2. FINDINGS; STATEMENT OF POLICY.**

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

3 (1) The United States is the global leader in
 4 wireless communications and broadband tech-
 5 nologies, both of which are vital parts of daily life
 6 in the United States, key components of the national
 7 infrastructure of the United States, and a signifi-
 8 cant driver of the United States economy.

9 (2) Wireless communications and broadband
 10 services have become critical for individuals to im-
 11 prove their economic well-being, businesses to com-
 12 pete in the 21st century, first responders to protect
 13 individuals in emergencies, and Federal agencies to
 14 service their missions, such as national defense.

15 (3) Because of the proliferation of broadband
 16 connected wireless devices and consumer applica-
 17 tions, the volume of data traffic traveling over wire-
 18 less networks has been growing substantially, and
 19 with the pace of innovation accelerating, the demand
 20 for wireless data services will continue to increase
 21 exponentially.

22 (4) The Council of Economic Advisors has con-
 23 cluded that the only feasible way to realize the full

1 potential of wireless broadband is to make new spec-
2 trum available for wireless services, and considerable
3 spectrum is underused or used in less economically
4 valuable ways, and could be repurposed and reallo-
5 cated for wireless broadband use.

6 (5) If the United States does not make more
7 spectrum available, scarcity of spectrum could lead
8 to higher prices for wireless services, poor service
9 quality, the inability of the United States to compete
10 internationally, constrained mobile broadband
11 growth, and ultimately, a drag on innovation and in-
12 dividual economic mobility.

13 (6) The National Broadband Plan, created by
14 the Federal Communications Commission, set a goal
15 of making 500 megahertz of spectrum newly avail-
16 able for commercial mobile broadband use by 2020,
17 including making 300 megahertz between 225 mega-
18 hertz and 3.7 gigahertz newly available for mobile
19 use within 5 years, and stated that reallocating this
20 spectrum where possible for mobile broadband use
21 should be a priority.

22 (7) Reallocating and auctioning spectrum pro-
23 duces multiple benefits. A Federal licensee can up-
24 grade to comparable or superior communications
25 technology, an auction raises money for the United

1 States Treasury, and taxpayers benefit from in-
2 creased access to, and better use of, spectrum.

3 (8) In addition to reallocating spectrum, the
4 United States should pursue a comprehensive ap-
5 proach to spectrum policy that includes expanding
6 the capacity of wireless networks, promoting sec-
7 ondary spectrum markets, expanding unlicensed net-
8 works and Wi-Fi systems, and increasing efficiency
9 and transparency among Federal users.

10 (9) The Federal Government, as the largest
11 user of spectrum, must also promote the efficient
12 use of spectrum resources, and the National Tele-
13 communications and Information Administration
14 must ensure that Federal agencies use this valuable
15 public resource in the most efficient and effective
16 manner possible.

17 (10) The National Broadband Plan states that
18 Federal spectrum users can be more efficient with
19 the airwaves allocated to them by the National Tele-
20 communications and Information Administration, es-
21 pecially as wireless needs and technology evolve over
22 time.

23 (b) PURPOSE.—The purpose of this Act is—

24 (1) to pursue comprehensive solutions to ex-
25 pand mobile broadband and utilize wireless services

1 and technologies to create jobs, grow the economy,
 2 and improve individual economic mobility; and

3 (2) to ensure that the Federal Government—

4 (A) utilizes its spectrum in the most effi-
 5 cient and effective way; and

6 (B) repurposes spectrum for commercial
 7 use wherever possible.

8 **SEC. 3. DEFINITIONS.**

9 In this Act:

10 (1) COMMISSION.—The term “Commission”
 11 means the Federal Communications Commission.

12 (2) NIST.—The term “NIST” means the Na-
 13 tional Institute of Standards and Technology.

14 (3) NTIA.—The term “NTIA” means the Na-
 15 tional Telecommunications and Information Admin-
 16 istration.

17 **SEC. 4. REALLOCATION OF FEDERAL GOVERNMENT SPEC-** 18 **TRUM.**

19 Section 113 of the National Telecommunications and
 20 Information Administration Organization Act (47 U.S.C.
 21 923) is amended by adding at the end the following:

22 “(m) FURTHER REALLOCATION REPORT.—

23 “(1) REPORT REQUIRED.—

24 “(A) IN GENERAL.—Not later than 1 year
 25 after the date of enactment of this subsection,

1 the Secretary shall prepare and submit to the
2 President and Congress a report (referred to in
3 this subsection as the ‘reallocation report’) that
4 identifies and recommends for reallocation
5 bands of frequencies—

6 “(i) that, in the aggregate, span not
7 less than 200 megahertz;

8 “(ii) that are located below 5
9 gigahertz;

10 “(iii) that are not covered by the pro-
11 ceeding of the Commission in GN Docket
12 No. 12–354;

13 “(iv) that, as of the date of submis-
14 sion of the reallocation report, are allo-
15 cated on an exclusive or primary basis for
16 Federal Government use;

17 “(v) from which Federal Government
18 stations may be relocated pursuant to sub-
19 section (g) or for which Federal Govern-
20 ment stations may be replaced by commer-
21 cially available substitutes;

22 “(vi) that, as of the date of submis-
23 sion of the reallocation report or at any
24 time during the 10-year period beginning
25 on that date, may feasibly be made avail-

1 able for the uses described in subpara-
2 graph (B);

3 “(vii) the transfer of which from, or
4 the sharing of which with, Federal Govern-
5 ment use will not result in costs to the
6 Federal Government, or losses of services
7 or benefits to the public, that are excessive
8 in relation to the benefits to the public
9 that may be provided by non-Federal li-
10 censees; and

11 “(viii) that are most likely to have the
12 greatest potential economic benefit to the
13 United States if reallocated and licensed
14 for non-Federal use.

15 “(B) ALLOCATION OF SPECTRUM.—Of the
16 spectrum described in subparagraph (A)—

17 “(i) 140 megahertz shall—

18 “(I) be allocated for commercial
19 mobile use on an exclusive, licensed
20 basis; and

21 “(II) be located below 3.7
22 gigahertz;

23 “(ii) not more than 20 megahertz may
24 be allocated for unlicensed use if—

1 “(I) such use protects licensed
2 services from harmful interference;
3 and

4 “(II) the spectrum allocated for
5 such use is located—

6 “(aa) in guard bands below
7 3.7 gigahertz—

8 “(AA) that are no larg-
9 er than technically necessary
10 to prevent harmful inter-
11 ference between licensed
12 services outside the guard
13 bands; and

14 “(BB) the unlicensed
15 use of which does not cause
16 harmful interference to li-
17 censed services; or

18 “(bb) between 3.7 gigahertz
19 and 5 gigahertz; and

20 “(iii) not more than 40 megahertz
21 may be shared with Federal Government
22 stations if—

23 “(I) the President limits the as-
24 signment of the Federal Government
25 stations so that the use of the spec-

1 trum by those stations is restricted by
2 geographic area, by time, or by other
3 means so as to guarantee that the
4 continued use by those stations is sub-
5 stantially less than the use made by
6 non-Federal stations; and

7 “(II) the operational sharing au-
8 thorized under this clause is subject
9 to—

10 “(aa) interference regula-
11 tions prescribed by the Commis-
12 sion under section 305(a) of the
13 1934 Act;

14 “(bb) coordination proce-
15 dures that the Commission and
16 the Secretary shall jointly estab-
17 lish and implement to ensure
18 against harmful interference; and

19 “(cc) the sharing arrange-
20 ments in a transition plan appli-
21 cable to the spectrum that the
22 Technical Panel finds sufficient
23 under subsection (h)(4).

1 “(C) RELOCATION OF FEDERAL GOVERN-
2 MENT STATIONS; COSTS.—The Secretary shall
3 include in the reallocation report—

4 “(i) recommendations for spectrum
5 bands to which Federal Government sta-
6 tions may be relocated; and

7 “(ii) the costs, as determined by the
8 Secretary in consultation with the Office of
9 Management and Budget, of the relocation
10 described in clause (i).

11 “(2) DIRECT DISCUSSIONS.—

12 “(A) IN GENERAL.—The Secretary shall
13 consult with the Federal Government users of
14 the spectrum and work through established
15 processes of the NTIA to encourage and pro-
16 vide opportunity for direct discussions among
17 commercial representatives and Federal Govern-
18 ment users of the spectrum to aid the Secretary
19 in determining which frequencies to recommend
20 for reallocation under this subsection.

21 “(B) NOTICE.—The Secretary shall pro-
22 vide notice to the public and the Commission of
23 any discussion held under subparagraph (A),
24 including the name of each business or other
25 person represented in the discussion.

1 “(C) REPRESENTATIVE OF COMMISSION.—

2 A representative of the Commission (and of the
3 Secretary, at the election of the Secretary) may
4 attend any discussion held under subparagraph
5 (A).

6 “(D) OPPORTUNITY FOR COMMENT.—Be-

7 fore the Secretary submits the reallocation re-
8 port, the Secretary shall provide the public and
9 the Commission with an opportunity to com-
10 ment on the results of any discussion held
11 under subparagraph (A).

12 “(3) TIMETABLE FOR WITHDRAWAL OR LIMITA-
13 TION OF ASSIGNMENTS.—

14 “(A) RECOMMENDED DEADLINES.—The
15 Secretary shall include in the reallocation report
16 a timetable that recommends effective dates by
17 which the President shall—

18 “(i) withdraw the assignment to Fed-
19 eral Government stations of the fre-
20 quencies specified in the reallocation report
21 (other than the frequencies identified
22 under paragraph (1)(B)(iii)); and

23 “(ii) in the case of the spectrum iden-
24 tified under paragraph (1)(B)(iii), limit the
25 assignment of that spectrum to Federal

1 Government stations as required under
2 subclause (I) of that paragraph.

3 “(B) ABSOLUTE DEADLINES.—

4 “(i) IN GENERAL.—Notwithstanding
5 the effective dates recommended by the
6 Secretary under subparagraph (A), not
7 later than the date described in clause (ii)
8 of this subparagraph, the President shall—

9 “(I) withdraw the assignment to
10 Federal Government stations of the
11 frequencies specified in the realloca-
12 tion report (other than the frequencies
13 identified under paragraph
14 (1)(B)(iii)); and

15 “(II) in the case of the spectrum
16 identified under paragraph (1)(B)(iii),
17 limit the assignment to Federal Gov-
18 ernment stations as required under
19 subclause (I) of that paragraph.

20 “(ii) DATE.—The date described in
21 this clause is the earlier of—

22 “(I) the date that is 3 years after
23 the beginning of the auction of the
24 frequencies specified in the realloca-

1 tion report pursuant to section
2 309(j)(15)(C)(vii) of the 1934 Act; or

3 “(II) the date as of which—

4 “(aa) each Federal Govern-
5 ment station has been relocated
6 from the frequencies specified in
7 the reallocation report (other
8 than the frequencies identified
9 under paragraph (1)(B)(iii)); and

10 “(bb) the assignment of the
11 frequencies identified under para-
12 graph (1)(B)(iii) to each Federal
13 Government station has been lim-
14 ited as required under subclause
15 (I) of that paragraph.

16 “(4) DEPARTMENT OF DEFENSE STATIONS.—
17 Section 1062(b) of the National Defense Authoriza-
18 tion Act for Fiscal Year 2000 (Public Law 106–65;
19 113 Stat. 768) shall apply to the relocation of sta-
20 tions operated by the Department of Defense in the
21 spectrum described in paragraph (1)(A) of this sub-
22 section.”.

1 **SEC. 5. SPECTRUM PIPELINE.**

2 (a) DEADLINE.—Section 309(j)(15)(C) of the Com-
 3 munications Act of 1934 (47 U.S.C. 309(j)(15)(C)) is
 4 amended by adding at the end the following:

5 “(vii) DEADLINES FOR THE AUCTION
 6 OF FREQUENCY BANDS UNDER THE WIRE-
 7 LESS INNOVATION ACT OF 2014.—The
 8 Commission shall conduct an auction of—

9 “(I) 80 megahertz of the spec-
 10 trum recommended for reallocation in
 11 the reallocation report under section
 12 113(m) of the National Telecommuni-
 13 cations and Information Administra-
 14 tion Organization Act not later than
 15 December 31, 2018;

16 “(II) an additional 60 megahertz
 17 of the spectrum recommended for re-
 18 allocation in the reallocation report
 19 described in subclause (I) not later
 20 than 18 months after the completion
 21 of the auction required under sub-
 22 clause (I); and

23 “(III) an additional 40 mega-
 24 hertz of the spectrum recommended
 25 for reallocation in the reallocation re-
 26 port described in subclause (I) not

1 later than 18 months after the com-
 2 pletion of the auction required under
 3 subclause (II).”.

4 (b) REGULATIONS.—Not later than 6 months before
 5 the Commission commences each auction required under
 6 section 309(j)(15)(C)(vii) of the Communications Act of
 7 1934, as added by subsection (a), the Commission shall
 8 promulgate regulations necessary to conduct the auction.

9 (c) TECHNICAL AND CONFORMING AMENDMENT.—
 10 Section 6401(b)(2) of the Middle Class Tax Relief and Job
 11 Creation Act of 2012 (47 U.S.C. 1451(b)(2)) is amend-
 12 ed—

13 (1) by striking subparagraph (C); and
 14 (2) by redesignating subparagraphs (D) and
 15 (E) as subparagraphs (C) and (D), respectively.

16 **SEC. 6. REALLOCATION INCENTIVE.**

17 (a) DEFINITIONS.—In this section—

18 (1) the term “Director” means the Director of
 19 the Office of Management and Budget; and

20 (2) the term “Federal entity” has the meaning
 21 given the term in section 113(l) of the National
 22 Telecommunications and Information Administration
 23 Organization Act (47 U.S.C. 923(l)).

24 (b) DEPOSIT OF PROCEEDS.—Notwithstanding sec-
 25 tion 309(j)(8)(D) of the Communications Act of 1934 (47

1 U.S.C. 309(j)(8)(D)), if the first auction of any eligible
 2 frequencies described in section 113(g)(2) of the National
 3 Telecommunications and Information Administration Or-
 4 ganization Act (47 U.S.C. 923(g)(2)) that takes place
 5 after the date of enactment of this Act meets the require-
 6 ments established under section 309(j)(16) of the Commu-
 7 nications Act of 1934 (47 U.S.C. 309(j)(16)), an amount
 8 equal to 1 percent of the proceeds attributable to the auc-
 9 tion shall be deposited in the Spectrum Relocation Fund
 10 established under section 118 of the National Tele-
 11 communications and Information Administration Organi-
 12 zation Act (47 U.S.C. 928) for use in accordance with sub-
 13 section (c) of this section.

14 (c) PAYMENTS FOR ADVANCE PLANNING AND EN-
 15 HANCED SPECTRUM EFFICIENCY.—

16 (1) IN GENERAL.—The Director, in consulta-
 17 tion with the NTIA, may use the amount made
 18 available under subsection (b) to make payments to
 19 any Federal entity—

20 (A) to conduct research and development,
 21 and operational, technical, cost, and schedule-
 22 feasibility analyses, regarding the potential fu-
 23 ture reallocation of additional spectrum from
 24 Federal use to exclusive non-Federal use or to
 25 shared use; and

(B) to develop and incorporate spectrum efficiency guidelines and spectrally efficient advanced or unique technology or techniques into the budget and procurement processes of the Federal entity to facilitate the design and procurement of Federal spectrum-dependent systems that increase flexibility through means such as multiple-band tuning capabilities and the use of commercial systems as appropriate, including through public-private partnerships.

(2) CONDITIONS.—

(A) USE OF PAYMENT TO ESTIMATE COSTS.—A Federal entity that receives a payment under subparagraph (A) of paragraph (1) to conduct the analyses described in that paragraph shall use the payment to estimate the costs specified in clauses (i) through (v) of section 113(g)(3)(A) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 923(g)(3)(A)) with respect to frequencies identified by the Federal entity for potential reallocation.

(B) RELOCATION OR SHARING COSTS.—

The Director may not make a payment under paragraph (1) if the amount made available

1 under subsection (b) is otherwise necessary to
2 cover relocation or sharing costs (as defined in
3 section 113(g)(3)) of the National Tele-
4 communications and Information Administra-
5 tion Organization Act (47 U.S.C. 923(g)(3))).

6 (C) NOTIFICATION REQUIRED.—The Di-
7 rector may not make a payment under para-
8 graph (1) until 30 days after the date as of
9 which the Director has notified the Committee
10 on Commerce, Science, and Transportation of
11 the Senate and the Committee on Energy and
12 Commerce of the House of Representatives of
13 the intent of the Director to make the payment.

14 (D) EMISSION LEVELS.—A Federal entity
15 that receives a payment under paragraph (1)
16 shall, to the extent possible, procure systems
17 described in subparagraph (B) of that para-
18 graph such that emission levels resulting from
19 reasonable use of adjacent spectrum will not
20 impair the functioning of the systems, con-
21 sistent with any applicable radio receiver per-
22 formance criteria and international obligations.

23 (3) ANNUAL REPORT.—Each year, the Director
24 shall submit to the Committee on Commerce,
25 Science, and Transportation of the Senate and the

1 Committee on Energy and Commerce of the House
2 of Representatives a report that—

3 (A) describes each payment that the Direc-
4 tor made to a Federal entity under this sub-
5 section during the preceding year; and

6 (B) details how each Federal entity used
7 each payment described in subparagraph (A).

8 **SEC. 7. EXPEDITING ROUTINE SECONDARY MARKET**
9 **TRANSACTIONS.**

10 Section 310 of the Communications Act of 1934 (47
11 U.S.C. 310) is amended by striking subsection (d) and in-
12 serting the following:

13 “(d) ASSIGNMENT AND TRANSFER OF CONSTRUC-
14 TION PERMIT OR STATION LICENSE.—

15 “(1) IN GENERAL.—

16 “(A) APPLICATION REQUIRED.—No con-
17 struction permit or station license, or any rights
18 thereunder, shall be transferred, assigned, or
19 disposed of in any manner, voluntarily or invol-
20 untarily, directly or indirectly, or by transfer of
21 control of any corporation holding such permit
22 or license, to any person except upon applica-
23 tion to the Commission and upon finding by the
24 Commission that the public interest, conven-
25 ience, and necessity will be served thereby.

1 “(B) ACTION UPON APPLICATION.—Any
2 application under subparagraph (A) shall be
3 disposed of as if the proposed transferee or as-
4 signee were making application under section
5 308 for the permit or license in question; but
6 in acting thereon the Commission may not con-
7 sider whether the public interest, convenience,
8 and necessity might be served by the transfer,
9 assignment, or disposal of the permit or license
10 to a person other than the proposed transferee
11 or assignee.

12 “(2) PRESUMPTION.—An application to the
13 Commission under paragraph (1) shall be deemed to
14 be in the public interest, convenient, and necessary,
15 and shall be granted not later than 90 days after the
16 date on which the Commission issues a public notice
17 of the application, unless the Commission acts to
18 deny the application, if the application—

19 “(A) does not involve an entity described
20 in subsection (b);

21 “(B) does not require premerger notifica-
22 tion and waiting period under section 7a of the
23 Clayton Act (15 U.S.C. 18a); and

1 “(C) is not a covered transaction under
 2 section 721 of the Defense Production Act of
 3 1950 (50 U.S.C. App. 2170).”.

4 **SEC. 8. ANALYSIS OF SPECTRUM REQUIREMENTS.**

5 Section 104(d) of the National Telecommunications
 6 and Information Administration Organization Act (47
 7 U.S.C. 903(d)) is amended—

8 (1) in paragraph (1)—

9 (A) by striking “In assigning” and insert-
 10 ing the following:

11 “(A) IN GENERAL.—In assigning”; and

12 (B) by adding at the end the following:

13 “(B) REQUIRED ANALYSIS.—Before the
 14 Secretary may assign frequencies for mobile
 15 radio services and other radio services, and sub-
 16 ject to subparagraph (C), each Federal agency
 17 seeking a new or modified frequency assignment
 18 for a mobile service or other radio service shall
 19 submit to the Secretary and the Director of the
 20 Office of Management and Budget (referred to
 21 in this paragraph as the ‘Director’) a report
 22 analyzing—

23 “(i) whether the Federal agency may
 24 use commercial services for the operation
 25 of the service rather than obtain a new or

1 modified frequency assignment consistent
2 with national security, public safety and
3 overall ability to reliably perform the Fed-
4 eral mission, including an explicit consider-
5 ation of the cost of contracting for the
6 commercial service against the cost of the
7 agency operating on the new or modified
8 frequency assignment;

9 “(ii) whether the proposed spectrum
10 requirements of the Federal agency
11 could—

12 “(I) use an existing or planned
13 service operated by the Federal agen-
14 cy or another Federal agency; or

15 “(II) share a frequency allocation
16 with an existing Federal agency, in-
17 cluding the use of dynamic and oppor-
18 tunistic spectrum sharing;

19 “(iii) whether the Federal agency
20 could—

21 “(I) use unlicensed spectrum; or

22 “(II) lease capacity from com-
23 mercial providers;

24 “(iv) if the Federal agency cannot use
25 a commercial or other Federal service, how

1 much spectrum the Federal agency needs
2 to operate the service;

3 “(v) whether the service requires a
4 frequency assignment below 3 gigahertz;
5 and

6 “(vi) whether, once the allocation is
7 made, the Federal agency may share the
8 spectrum with non-Federal users.

9 “(C) REVIEW OF ANALYSIS.—

10 “(i) IN GENERAL.—The Secretary, in
11 consultation with the Director and any
12 Federal agency that the Secretary may de-
13 termine appropriate, shall determine
14 whether to grant a request of a Federal
15 agency for a new or modified frequency as-
16 signment for a mobile service or other
17 radio service.

18 “(ii) ALTERATION OF ALLOCATION.—
19 If the Secretary determines that a request
20 described in clause (i) is better met
21 through sharing frequencies or systems
22 with another Federal agency, the Sec-
23 retary, in consultation with the Director,
24 the requesting Federal agency, the Federal
25 agency with whom the requesting Federal

1 agency will share systems or allocation,
2 and any other Federal agency that the
3 Secretary may determine appropriate, shall
4 alter the previously granted allocation ac-
5 cordingly.

6 “(D) BUDGET AND PROCUREMENT PROC-
7 ESSES.—

8 “(i) IN GENERAL.—A Federal agency
9 shall include spectrum efficiency when con-
10 sidering procurement of spectrum-depend-
11 ent systems and hardware, as a technical
12 requirement, an evaluation criterion for
13 award, or both.

14 “(ii) SPECTRUM EFFICIENCY GUIDE-
15 LINES.—The NTIA and the Director shall
16 develop and incorporate spectrum effi-
17 ciency guidelines into budget and procure-
18 ment processes.

19 “(iii) PURPOSE AND CONTENT OF
20 GUIDELINES.—The guidelines developed
21 under clause (ii) shall—

22 “(I) facilitate, as appropriate, the
23 design and procurement of systems
24 that increase flexibility through means
25 such as multiple-band tuning capabili-

1 ties and the use of commercial sys-
2 tems; and

3 “(II) require, to the extent pos-
4 sible, procurement of Federal systems
5 such that emission levels resulting
6 from reasonable use of adjacent spec-
7 trum will not impair the functioning
8 of such systems, consistent with any
9 applicable radio receiver performance
10 criteria and international obligations.

11 “(E) TRANSPARENCY OF FEDERAL SPEC-
12 TRUM ALLOCATIONS.—

13 “(i) PUBLIC AVAILABILITY.—All re-
14 quests for allocation made under this Act
15 shall be published in the Federal Register.

16 “(ii) DATABASE.—The NTIA shall
17 maintain a database of all requests for al-
18 location made under this Act that is
19 searchable electronically and available to
20 the public.

21 “(iii) PUBLIC COMMENT PERMIS-
22 SIBLE.—At the discretion of the Secretary,
23 the Secretary may seek public comment on
24 any requested allocation.

1 “(iv) NATIONAL SECURITY PRO-
 2 TECTED.—Where necessary to protect the
 3 interests of national security, the Assistant
 4 Secretary shall redact a request for alloca-
 5 tion made under this Act from the pub-
 6 lic.”; and

7 (2) in paragraph (2), by striking “The Sec-
 8 retary” and inserting “In addition to the cir-
 9 cumstances described in paragraph (1)(C), the Sec-
 10 retary”.

11 **SEC. 9. FEDERAL SPECTRUM TRANSPARENCY AND VALUE.**

12 (a) ANALYSIS OF ECONOMIC OPPORTUNITY COST.—

13 (1) DEVELOPMENT OF FRAMEWORK.—Not later
 14 than 1 year after the date of enactment of this Act,
 15 the NTIA, in consultation with the Commission and
 16 the Director of the Office of Management and Budg-
 17 et, shall develop a framework for determining the
 18 annual economic opportunity cost of each specific
 19 Federal spectrum band assigned or otherwise allo-
 20 cated for use by Federal entities.

21 (2) SCOPE.—The framework developed under
 22 paragraph (1) shall cover all federally allocated spec-
 23 trum bands between 150 megahertz and 6000 mega-
 24 hertz, inclusive.

1 (3) GOALS.—The goals of the framework devel-
2 oped under paragraph (1) are—

3 (A) to provide Federal entities with a sus-
4 tained long-term signal of spectrum value to in-
5 form the spectrum management decisions of
6 such entities; and

7 (B) to provide the public with increased
8 transparency about how Federal entities use a
9 scarce physical resource.

10 (4) REQUIREMENTS.—The framework devel-
11 oped under paragraph (1) shall—

12 (A) define the term “opportunity cost” as
13 the value of the spectrum, in dollar terms, as
14 if such spectrum were to be reallocated on a li-
15 censed basis to the highest commercial alter-
16 native use that currently does not have access
17 to that spectrum;

18 (B) be updated, on an annual basis, to
19 take into account observed market valuations
20 from spectrum auctions, secondary spectrum
21 trading, and other market indicators of spec-
22 trum value;

23 (C) determine the opportunity costs borne
24 by each Federal entity for each spectrum band

1 that is entirely under the control of a single
2 agency; and

3 (D) determine the opportunity costs for
4 spectrum assigned or otherwise allocated to
5 Federal entities for both primary use and sec-
6 ondary use.

7 (b) REPORT ON OPPORTUNITY COSTS.—Each Fed-
8 eral entity that has been assigned or otherwise allocated
9 use of a Federal spectrum band shall report, as an off-
10 budget item, the opportunity cost borne by the entity for
11 each spectrum band the entity uses—

12 (1) in the budget of the entity to be included
13 in the budget of the United States Government sub-
14 mitted by the President under section 1105 of title
15 31, United States Code; and

16 (2) in the annual financial statement of the
17 Federal entity required to be filed under section
18 3515 of title 31, United States Code.

19 (c) SPECTRUM VALUE ANALYSIS.—Not later than 5
20 years after the date of enactment of this Act, and every
21 5 years thereafter, each Federal entity that has been as-
22 signed or otherwise allocated use of a Federal spectrum
23 band, or otherwise utilizes such spectrum, shall engage in
24 an analysis comparing the opportunity cost of that spec-
25 trum, as such cost is determined by the framework devel-

1 oped by the NTIA under subsection (a), to the projected
2 costs of the entity relocating to other government spec-
3 trum holdings, co-locating with other government agen-
4 cies, leasing other non-Federal spectrum, or contracting
5 out for its spectrum activities.

6 (d) SPECTRUM TECHNOLOGY STUDY.—

7 (1) IN GENERAL.—Not later than 18 months
8 after the date of enactment of this Act, and every
9 5 years thereafter, the Chief Technology Officer, in
10 consultation with the Assistant Secretary of Com-
11 merce for Communications and Information and the
12 Comptroller General of the United States, shall ex-
13 amine the technologies and equipment used by Fed-
14 eral entities operating on Federal spectrum alloca-
15 tions and determine if such technologies and equip-
16 ment are the most spectrum-efficient available.

17 (2) CERTAIN DETERMINATIONS MADE.—If the
18 results of any study required under paragraph (1)
19 determine that the technologies and equipment of
20 Federal entities operating on Federal spectrum allo-
21 cations are not the most spectrum-efficient available,
22 the Comptroller General shall determine—

23 (A) what the costs would be to upgrade
24 such systems to more up-to-date and readily
25 available systems;

1 (B) what benefits would be gained from
 2 upgrading, particularly any cost savings or in-
 3 creases in spectrum utilization efficiency; and

4 (C) if there are any possible problems with
 5 upgrading to more up-to-date systems.

6 (e) SPECTRUM OPPORTUNITY COST AND FRAME-
 7 WORK STUDY.—

8 (1) IN GENERAL.—The Comptroller General of
 9 the United States, in consultation with the NTIA,
 10 shall—

11 (A) conduct a review of the framework de-
 12 veloped under subsection (a);

13 (B) conduct a review of the reports re-
 14 quired under subsection (b) and the processes
 15 that Federal entities use to evaluate the oppor-
 16 tunity cost borne for each spectrum band the
 17 Federal entities use; and

18 (C) make recommendations on how to im-
 19 prove such framework and reporting.

20 (2) REPORT.—Not later than 2 years after the
 21 date of enactment of this Act, and every 2 years
 22 thereafter, the Comptroller General of the United
 23 States shall submit to the appropriate committees in

- 1 Congress a report on the review and recommenda-
- 2 tions required under paragraph (1).

