

RADIO SPECTRUM INVENTORY ACT

APRIL 13, 2010.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. WAXMAN, from the Committee on Energy and Commerce,
submitted the following

R E P O R T

[To accompany H.R. 3125]

[Including cost estimate of the Congressional Budget Office]

The Committee on Energy and Commerce, to whom was referred the bill (H.R. 3125) to require an inventory of radio spectrum bands managed by the National Telecommunications and Information Administration and the Federal Communications Commission, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

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AMENDMENT

The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Radio Spectrum Inventory Act”.

SEC. 2. SPECTRUM INVENTORY.

Part B of title I of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 921 et seq.) is amended by adding at the end the following:

“SEC. 119. SPECTRUM INVENTORY.

“(a) RADIO SPECTRUM INVENTORY.—In order to promote the efficient use of the electromagnetic spectrum, the NTIA and the Commission shall coordinate and carry out each of the following activities not later than 1 year after the date of enactment of this section:

“(1) Except as provided in subsection (e), create an inventory of each radio spectrum band of frequencies listed in the United States Table of Frequency Allocations, from 225 megahertz to, at a minimum, 3.7 gigahertz, and to 10 gigahertz unless the NTIA and the Commission determine that the burden of expanding the inventory outweighs the benefit, that includes—

“(A) the radio services authorized to operate in each band of frequencies;

“(B) the identity of each Federal or non-Federal user within each such radio service authorized to operate in each band of frequencies;

“(C) the activities, capabilities, functions, or missions (including whether such activities, capabilities, functions, or missions are space-based, air-based, or ground-based) supported by the transmitters, end-user terminals or receivers, or other radio frequency devices authorized to operate in each band of frequencies;

“(D) the total amount of spectrum, by band of frequencies, assigned or licensed to each Federal or non-Federal user (in percentage terms and in sum) and the geographic areas covered by their respective assignments or licenses;

“(E) the approximate number of transmitters, end-user terminals or receivers, or other radio frequency devices authorized to operate, as appropriate to characterize the extent of use of each radio service in each band of frequencies;

“(F) an approximation of the extent to which each Federal or non-Federal user is using, by geography, each band of frequencies, such as the amount and percentage of time of use, number of end users, or other measures as appropriate to the particular band and radio service; and

“(G) to the greatest extent possible—

“(i) contour maps or other information that illustrate the coverage area, receiver performance, and other parameters relevant to an assessment of the availability of spectrum in each band;

“(ii) for each band or range of frequencies, the identity of each entity offering unlicensed services and the types and approximate number of unlicensed intentional radiators verified or certified by the Commission that are authorized to operate; and

“(iii) for non-Federal users, any commercial names under which facilities-based service is offered to the public using the spectrum of the non-Federal user, including the commercial names under which the spectrum is being offered through resale.

“(2) Except as provided in subsection (e), create a centralized portal or Web site to make the inventory of the bands of frequencies required under paragraph (1) available to the public.

“(b) USE OF AGENCY RESOURCES.—In creating the inventory described in subsection (a)(1), the NTIA and the Commission shall first use agency resources, including existing databases, field testing, and recordkeeping systems, and only request information from Federal and non-Federal users if such information cannot be obtained using such agency resources.

“(c) REPORTS.—

“(1) IN GENERAL.—Except as provided in subsection (e), not later than 2 years after the date of enactment of this section and biennially thereafter, the NTIA and the Commission shall submit a report to the Committee on Commerce, Science, and Transportation of the Senate and to the Committee on Energy and Commerce of the House of Representatives containing—

“(A) the results of the inventory created under subsection (a)(1), including any update to the information in the inventory pursuant to subsection (d);

“(B) a description of any information the NTIA or the Commission determines is necessary for such inventory but that is unavailable; and

“(C) a description of any information not provided by any Federal or non-Federal user in accordance with subsections (e)(1)(B)(ii) and (e)(2)(C)(ii).

“(2) RELOCATION REPORT.—

“(A) IN GENERAL.—Except as provided in subsection (e), the NTIA and the Commission shall submit a report to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives containing a recommendation of which spectrum, if any, should be reallocated or otherwise made available for shared access and an explanation of the basis for that recommendation.

“(B) DEADLINES.—The report required under subparagraph (A) shall be submitted not later than 4 years after the date of enactment of this section and every 4 years thereafter.

“(3) INVENTORY REPORT.—If the NTIA and the Commission have not conducted an inventory under subsection (a) to 10 gigahertz at least 90 days before the third report required under paragraph (1) is submitted, the NTIA and the Commission shall include an evaluation in such report and in every report thereafter of whether the burden of expanding the inventory to 10 gigahertz outweighs the benefit until such time as the NTIA and the Commission have conducted the inventory to 10 gigahertz.

“(d) MAINTENANCE AND UPDATING OF INFORMATION.—After the creation of the inventory required by subsection (a)(1), the NTIA and the Commission shall make all reasonable efforts to maintain and update the information required under such subsection on a quarterly basis, including when there is a transfer or auction of a license or a change in a permanent assignment or license.

“(e) NATIONAL SECURITY AND PUBLIC SAFETY INFORMATION.—

“(1) NONDISCLOSURE.—

“(A) IN GENERAL.—If the head of an executive agency of the Federal Government determines that public disclosure of certain information held by that agency or a licensee of non-Federal spectrum and required by subsection (a), (c), or (d) would reveal classified national security information or other information for which there is a legal basis for nondisclosure and such public disclosure would be detrimental to national security, homeland security, or public safety, the agency head shall notify the NTIA of that determination and shall include descriptions of the activities, capabilities, functions, or missions (including whether they are space-based, air-based, or ground-based) supported by the information being withheld.

“(B) INFORMATION PROVIDED.—The agency head shall provide to NTIA—

“(i) the publicly releasable information required by subsection (a)(1);

“(ii) to the maximum extent practicable, a summary description, suitable for public release, of the classified national security information or other information for which there is a legal basis for nondisclosure; and

“(iii) a classified annex, under appropriate cover, containing the classified national security information or other information for which there is a legal basis for nondisclosure that the agency head has determined must be withheld from public disclosure.

“(2) PUBLIC SAFETY NONDISCLOSURE.—

“(A) IN GENERAL.—If a licensee of non-Federal spectrum determines that public disclosure of certain information held by that licensee and required to be submitted by subsection (a), (c), or (d) would reveal information for which public disclosure would be detrimental to public safety, or the licensee is otherwise prohibited by law from disclosing the information, the licensee may petition the Commission for a partial or total exemption from inclusion on the centralized portal or Web site under subsection (a)(2) and in the report required by subsection (c).

“(B) BURDEN.—The licensee seeking an exemption under this paragraph bears the burden of justifying the exemption and shall provide clear and convincing evidence to support such an exemption.

“(C) INFORMATION REQUIRED.—If an exemption is granted under this paragraph, the licensee shall provide to the Commission—

“(i) the publicly releasable information required by subsection (a)(1) for the inventory;

“(ii) to the maximum extent practicable, a summary description, suitable for public release, of the information for which public disclosure would be detrimental to public safety or the licensee is otherwise prohibited by law from disclosing; and

“(iii) an annex, under appropriate cover, containing the information that the Commission has determined should be withheld from public disclosure.

“(3) ADDITIONAL DISCLOSURE.—The annexes required under paragraphs (1)(B)(iii) and (2)(C)(iii) shall be provided to the congressional committees listed in subsection (c), but shall not be disclosed to the public under subsection (a) or subsection (d) or provided to any unauthorized person through any other means.

“(4) NATIONAL SECURITY COUNCIL CONSULTATION.—Prior to the release of the inventory under subsection (a), any updates to the inventory resulting from subsection (d), or the submission of a report under subsection (c)(1), the NTIA and the Commission shall consult with the National Security Council for a period not to exceed 30 days for the purposes of determining what additional information, if any, shall be withheld from the public.

“(f) PROPRIETARY INFORMATION.—In creating and maintaining the inventory, centralized portal or Web site, and reports under this section, the NTIA and the Commission shall follow their rules and practice regarding confidential and proprietary information. Nothing in this subsection shall be construed to compel the Commission to make publicly available any confidential or proprietary information.”

PURPOSE AND SUMMARY

H.R. 3125, the Radio Spectrum Inventory Act, was introduced on July 8, 2009, by Reps. Henry Waxman (D–CA), Rick Boucher (D–VA), Joe Barton (R–TX), and Cliff Stearns (R–FL). H.R. 3125 would require the National Telecommunications and Information Administration (NTIA) and the Federal Communications Commission (FCC) to jointly develop a publicly-accessible spectrum inventory and submit regular reports to Congress regarding such an inventory. It would also require those agencies to make periodic recommendations as to which spectrum frequencies, if any, should be reallocated or otherwise made available for shared access.

BACKGROUND AND NEED FOR LEGISLATION

There were approximately 270 million wireless subscribers in the United States at the end of 2008,¹ including an estimated 40 million active users of mobile Internet services.² The Wireless Communications Association International estimates that a single smart phone consumes 30 times the amount of data used by a traditional handheld device, often because it is used to access bandwidth-intensive applications such as online video and gaming.³

Wireless carriers have suggested that the current allocation of spectrum for mobile broadband in the United States compares unfavorably with other nations and is inadequate to meet the rapidly growing demand for wireless services.⁴ That view has been echoed by FCC Chairman Julius Genachowski, who has stated that a “looming spectrum crisis” may be the “biggest threat to the future of mobile in America.”⁵ Recognizing the growing need for spectrum, the National Broadband Plan recommends that the country make “500 megahertz newly available for broadband use within the

¹ CTIA—The Wireless Association, Semi-Annual Wireless Industry Survey (Apr. 1, 2009) (online at http://files.ctia.org/pdf/CTIA_Survey_Year-End_2008_Graphics.pdf).

² Comments of Motorola, A National Broadband Plan for Our Future, GN Docket No. 09–51, Notice of Inquiry, 24 FCC Rcd 4342 (2009) (June 8, 2009).

³ Comments of Wireless Communications Association International, A National Broadband Plan for Our Future, GN Docket No. 09–51, Notice of Inquiry, 24 FCC Rcd 4342 (2009) (June 8, 2009).

⁴ Comment of CTIA—The Wireless Association, A National Broadband Plan for Our Future, GN Docket No. 09–51, Notice of Inquiry, 24 FCC Rcd 4342 (2009) (June 8, 2009).

⁵ Prepared Remarks of Chairman Julius Genachowski, Federal Communications Commission, America’s Mobile Broadband Future (Oct. 7, 2009) (online at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293891A1.doc).

next 10 years, of which 300 megahertz between 225 MHz and 3.5 GHz should be made newly available for mobile use within five years.”⁶

Designating new spectrum for broadband use is not the only way to increase available bandwidth for broadband applications. The emergence of spectrum sensing and sharing technologies, including wireless devices or systems that are more aware of their radio environment through real-time spectrum monitoring measurements or access to databases, are beginning to enable more dynamic forms of shared access for spectrum. As one witness testified at the legislative hearing on H.R. 3125, “[b]y taking advantage of this more localized, real-time information [wireless devices or systems] are potentially able to access unused spectrum that may be available on a moment-by-moment rather than just a long term basis,”⁷ providing a potential solution to reducing network congestion. Furthermore, advances in technology continually result in increases in which bands of spectrum are considered usable for wireless services.

H.R. 3125, the Radio Spectrum Inventory Act, was developed to provide policymakers with greater transparency concerning the current uses of spectrum and the potential availability of spectrum for new and innovative services, including broadband services.

LEGISLATIVE HISTORY

On July 8, 2009, Reps. Waxman, Boucher, Barton, and Stearns introduced H.R. 3125, the Radio Spectrum Inventory Act. The bill was referred to the Subcommittee on Communications, Technology, and the Internet on July 9, 2009. The Subcommittee held a legislative hearing on H.R. 3125 on December 15, 2009. The Subcommittee received testimony from witnesses representing the New America Foundation, Lockheed Martin Corporation, CTIA—The Wireless Association, the National Association of Broadcasters, and Shared Spectrum, Inc., as well as from a professor at the University of Colorado.

COMMITTEE CONSIDERATION

On Thursday, January 21, 2010, the Subcommittee on Communications, Technology, and the Internet met in open markup session to consider H.R. 3125. The Subcommittee adopted an Amendment in the Nature of a Substitute offered by Subcommittee Chairman Boucher and subsequently forwarded H.R. 3125, amended, favorably to the full Committee by a voice vote.

The full Committee met in open markup session on Wednesday, March 10, 2010. The Committee adopted an Amendment in the Nature of a Substitute offered by Mr. Boucher. Subsequently the Committee ordered H.R. 3125 favorably reported to the House, amended, by a voice vote.

⁶Federal Communications Commission, Connecting America: The National Broadband Plan at 77 (Mar. 16, 2010) (online at <http://download.broadband.gov/plan/national-broadband-plan.pdf>).

⁷House Committee on Energy and Commerce, Testimony of Dale N. Hatfield, Hearing on H.R. 3125, the Radio Spectrum Inventory Act, and H.R. 3019, the Spectrum Relocation Improvement Act of 2009, 111th Cong. (Dec. 15, 2009).

COMMITTEE VOTES

Clause 3(b) of rule XIII of the Rules of the House of Representatives requires the Committee to list the record votes on the motion to report legislation and amendments thereto. A motion by Mr. Waxman to order H.R. 3125 favorably reported to the House, amended, was agreed to by a voice vote. There were no recorded votes taken during the consideration of H.R. 3125.

STATEMENT OF COMMITTEE OVERSIGHT FINDINGS AND
RECOMMENDATIONS

In compliance with clause 3(c)(1) of rule XIII and clause (2)(b)(1) of rule X of the Rules of the House of Representatives, the Committee's oversight findings and recommendations are reflected in the descriptive portions of this report.

STATEMENT OF GENERAL PERFORMANCE GOALS AND OBJECTIVES

In accordance with clause 3(c)(4) of rule XIII of the Rules of the House of Representatives, the Committee's performance goals and objectives are reflected in the descriptive portions of this report.

CONSTITUTIONAL AUTHORITY STATEMENT

Under clause 3(d)(1) of rule XIII of the Rules of the House of Representatives, the Committee must include a statement citing the specific powers granted to Congress to enact the law proposed by H.R. 3125. Article I, section 8, clauses 3 and 18 of the Constitution of the United States grants the Congress the power to enact this law.

EARMARKS AND TAX AND TARIFF BENEFITS

H.R. 3125 does not contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9(d), 9(e), or 9(f) of rule XXI of the Rules of the House of Representatives.

FEDERAL ADVISORY COMMITTEE STATEMENT

The Committee finds that the legislation does not establish or authorize the establishment of an advisory committee within the definition of 5 U.S.C. App., section 5(b).

APPLICABILITY OF LAW TO THE LEGISLATIVE BRANCH

Section 102(b)(3) of Public Law 104-1 requires a description of the application of this bill to the legislative branch where the bill relates to terms and conditions of employment or access to public services and accommodations.

H.R. 3125 directs the NTIA and the FCC to create a spectrum inventory. As such this bill does not relate to employment or access to public services and accommodations.

FEDERAL MANDATES STATEMENT

Section 423 of the Congressional Budget and Impoundment Control Act (as amended by Section 101(a)(2) of the Unfunded Mandates Reform Act, P.L. 104-4) requires a statement whether the provisions of the reported bill include unfunded mandates. In com-

pliance with this requirement the Committee has received a letter from the Congressional Budget Office included herein.

COMMITTEE COST ESTIMATE

Clause 3(d)(2) of rule XIII of the Rules of the House of Representatives requires an estimate and a comparison by the Committee of the costs that would be incurred in carrying out H.R. 3125. Clause 3(d)(3)(B) of that rule, however, provides that this requirement does not apply when the Committee has included in its report a timely submitted cost estimate of the bill prepared by the Director of the Congressional Budget Office under section 402 of the Congressional Budget Act.

BUDGET AUTHORITY AND CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

With respect to the requirements of clause 3(c)(2) of rule XIII of the Rules of the House of Representatives and section 308(a) of the Congressional Budget Act of 1974 and with respect to requirements of clause 3(c)(3) of rule XIII of the Rules of the House of Representatives and section 402 of the Congressional Budget Act of 1974, the Committee has received the following cost estimate for H.R. 3125 from the Director of the Congressional Budget Office:

MARCH 22, 2010.

Hon. HENRY A. WAXMAN,
Chairman, Committee on Energy and Commerce,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 3125, the Radio Spectrum Inventory Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Susan Willie.

Sincerely,

DOUGLAS W. ELMENDORF.

Enclosure.

H.R. 3125—Radio Spectrum Inventory Act

Summary: H.R. 3125 would require the National Telecommunications Information Administration (NTIA) and the Federal Communications Commission (FCC) to conduct an inventory of the license holders and users of certain frequencies of the radio broadcast spectrum. The agencies would be required to complete the inventory within one year of enactment of the bill and to make the results available to the public on the Internet.

Based on information from NTIA and FCC, CBO estimates that implementing H.R. 3125 would increase net discretionary spending by \$16 million over the 2011–2015 period, assuming appropriation of the necessary amounts. Pay-as-you-go procedures do not apply to this legislation because it would not affect direct spending or revenues.

H.R. 3125 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would not affect the budgets of state, local, or tribal governments.

Estimated cost to the Federal Government: The estimated budgetary impact of H.R. 3125 is shown in the following table. The costs of this legislation fall within budget function 370 (commerce and housing credit).

	By fiscal year in millions of dollars—					
	2011	2012	2013	2014	2015	2011–2015
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Estimated Authorization Level	3	3	4	3	4	17
Estimated Outlays	2	3	4	3	4	16

Basis of estimate: For this estimate, CBO assumes that the bill will be enacted near the end of fiscal year 2010 and that the necessary amounts will be appropriated each year.

H.R. 3125 would require the two federal agencies responsible for managing the telecommunications spectrum (NTIA for federal government use and FCC for commercial and nonfederal use) to conduct an inventory of the license holders and users of certain radio frequencies that they manage. The inventory would be completed within one year of enactment of the bill and would be updated on a quarterly basis. The bill also would require the agencies to make the results of the inventory available to the public on the Internet.

The bill would require the agencies to prepare two reports. The first, to present the results of the inventory, would be due two years after the date of enactment and would be updated biennially thereafter. The second, to provide recommendations by NTIA and the FCC of spectrum that should be reallocated or made available for sharing, would be due four years after enactment and would be updated every four years thereafter.

Based on information from NTIA and the FCC, CBO estimates that implementing H.R. 3125 would cost \$31 million over the 2011–2015 period, assuming appropriation of the necessary amounts. Most of that cost would be incurred to collect information about the users of each band of spectrum and update the databases that track that information. CBO estimates that costs to the FCC would total \$15 million over the 2010–2015 period; costs to NTIA would be about \$16 million over the same period. Further, under current law, the FCC is authorized to collect fees to offset the costs of its regulatory program; subject to appropriations action, CBO estimates that the FCC would collect \$15 million in fees to offset the bill's costs. Therefore, CBO estimates that implementing H.R. 3125 would increase net discretionary spending by \$16 million over the 2011–2015 period.

Pay-as-you-go considerations: None.

Intergovernmental and private-sector impact: H.R. 3125 contains no intergovernmental or private-sector mandates as defined in UMRA and would not affect the budgets of state, local, or tribal governments.

Previous CBO estimate: On July 28, 2009, CBO transmitted a cost estimate for S. 649, the Radio Spectrum Inventory Act, as ordered reported by the Senate Committee on Commerce, Science, and Transportation on July 8, 2009. The Senate bill includes a requirement to make the inventory available to the public on the Internet, updated as changes occur. H.R. 3125 does not include the real-time update requirement but does require the agencies to col-

lect more detailed information for the inventory. The cost estimates for the two bills reflect those differences.

Estimate prepared by: Federal Costs: Susan Willie; Impact on State, Local, and Tribal Governments: Elizabeth Cove Delisle; Impact on the Private Sector: Sam Wice.

Estimate approved by: Theresa Gullo, Deputy Assistant Director for Budget Analysis.

SECTION-BY-SECTION ANALYSIS OF THE LEGISLATION

Section 1. Short title

This Act is entitled the “Radio Spectrum Inventory Act”.

Section 2. Radio spectrum inventory

Section 2 of the bill creates new section 119 of the National Telecommunications and Information Administration Organization Act.

New section 119(a) requires the NTIA and the FCC to develop an inventory of each spectrum band in the U.S. Table of Frequency Allocations from 225 megahertz to at least 3.7 gigahertz, and to 10 gigahertz unless the NTIA and the FCC determine that the burden of expanding the inventory outweighs the benefits. The inventory shall include (1) the services authorized to operate in each band; (2) the identity of each federal or non-federal user authorized to operate in each band; (3) the activities, capabilities, functions, or missions supported by the devices in each band of frequencies, including whether such missions are space, air, or ground based; (4) the total amount of spectrum assigned or licensed to each federal or non-federal user and the geographic areas covered by these allocations; (5) the approximate number of transmitters or other devices authorized to operate within each allocation; and (6) an approximation of the extent of use by geography of each federal or non-federal user within each band.

To the greatest extent possible, the inventory would also include: (1) contour maps or other information that illustrate the coverage areas of users in each spectrum band, (2) the identity of each entity offering unlicensed services and the types and approximate number of unlicensed devices verified or certified by the FCC that are authorized to operate in each band, and (3) for non-federal users, any commercial names under which the user offers service to the public.

The NTIA and the FCC are required to create a centralized portal or Web site to make the inventory available to the public under subsection (a)(2).

New subsection (a)(1)(F) directs the NTIA and the FCC to collect information that would approximate “the extent to which each federal or non-federal user is using, by geography, each band of frequencies, such as the amount and percentage of time of use, number of end users, or other measures as appropriate to the particular band and radio service.” The reference to “amount and percentage of time of use” is merely illustrative of the types of information that may be appropriate for the agencies to use to characterize the extent of use in each spectrum band, but it is not a requirement. Although the agencies are not required to include “amount and percentage of time of use” to describe the extent of use, the Committee encourages federal and non-federal users to report such informa-

tion whenever it is readily available and appropriate to characterize the use of that band of spectrum. If such information is reported, the NTIA and the FCC are encouraged to provide further context regarding such use in the reports to Congress under subsection (c), including the functions or missions supported by the devices located in the band.

New section 119(b) directs the FCC and the NTIA to first use agency resources, including existing databases, field testing, and recordkeeping systems, in creating the inventory. The FCC and the NTIA should only request information from federal and non-federal users if information needed for the inventory cannot be obtained using agency resources. The Committee expects the agencies to follow the same requirement with respect to the creation of the centralized portal or Web site that makes the inventory public. The Committee does not intend that the bill will require the imposition of extensive new data reporting obligations on licensees. To the extent the agencies require additional information from federal and non-federal users, the Committee encourages the agencies to require only the submission of additional information that is readily available. The Committee intends for the reference to “field testing” to be illustrative of the types of existing agency resources that the NTIA and the FCC shall first use before obtaining information from spectrum licensees. The Commission should treat existing databases and recordkeeping systems in the same manner. The Committee does not intend for the agencies to expend additional resources such as conducting additional field tests to collect data to comply with this subsection.

New section 119(c) directs the NTIA and the FCC to provide reports to the House Committee on Energy and Commerce and Senate Committee on Commerce, Science, and Transportation biennially, commencing not later than two years after the date of enactment. These reports shall contain: (1) the results of the inventory, including any updates; (2) a description of any information that the NTIA or the FCC determines is necessary for the inventory but was unavailable; (3) a description of any information that was not made available for the inventory due to the national security and public safety provisions of the Act; and (4) if the NTIA and the FCC have not extended the inventory to 10 GHz at least 90 days before the date the third inventory report (6 years after the date of enactment) is submitted to the Committees, an evaluation in that report and in every report thereafter of whether the burden of expanding the inventory to 10 GHz outweighs the benefit until such time as the NTIA and the FCC have extended the inventory to 10 GHz.

Under new section 119(c)(2), the NTIA and the FCC must submit a separate report to Congress not later than 4 years after the date of enactment of the bill and every 4 years thereafter containing a recommendation of which spectrum frequencies, if any, should be reallocated or otherwise made available for shared access and an explanation of the basis for that recommendation. The Committee does not intend for this quadrennial reallocation report requirement to delay, impede, or otherwise interfere with existing or ongoing efforts by the NTIA or the FCC to identify spectrum for reallocation or shared access. Rather, the Committee seeks to create a regular process by which the NTIA and the FCC will continu-

ously review the efficiency of spectrum usage. Nothing in the bill prevents the NTIA and the FCC from completing and submitting any relocation report prior to the deadlines set forth in the measure, and the Committee strongly encourages the agencies to do so. The Committee is encouraged by the goal outlined in the National Broadband Plan of freeing up 500 MHz of spectrum over the next decade for wireless services and believes such efforts should commence immediately and without regard to the timing of the reports required under (c)(3).

Furthermore, by using the term “shared access,” the Committee does not mean to exclude non-traditional modes of “sharing” among distinct users. Rather, the NTIA and the FCC should also consider dynamic sharing involving so-called “smart” sensing devices, or devices that are able to access real-time spectrum monitoring databases.

When providing reallocation recommendations, if any, the NTIA and the FCC should base such recommendations not only on how much the spectrum is currently used, but also on the nature of such use, including whether the spectrum is utilized in bursts and whether its usage varies significantly with specific incidents such as during emergency responses and military exercises. The NTIA and the FCC should consult with federal agencies affected by the recommendations contained in the report.

Should the NTIA and the FCC decide to not expand the inventory to include spectrum located between 3.7 Gigahertz and 10 Gigahertz, this bill, under new section 119(c)(3), requires that they submit a cost-benefit analysis to Congress starting with the third inventory report. The Committee does not intend for the cost-benefit analysis to be overly burdensome. The NTIA and the FCC should provide a summary description of the burdens of expanding the inventory to additional spectrum and any corresponding benefits. The cost of conducting an expanded inventory may include the burden on resources or personnel or significant national security and public safety concerns. The benefit may include the extent to which there is potential value in other commercial or government use of the spectrum above 3.7 GHz in light of currently available technologies to use such frequencies, or the extent to which relocation leads to more efficient uses of spectrum by the relocated users. The agencies are not required to provide a band-by-band cost-benefit analysis.

New section 119(d) directs the NTIA and the FCC to make all reasonable efforts to maintain and update the information in the inventory on a quarterly basis, including information regarding transfer, auction, or change in a permanent assignment of a license.

New section 119(e) allows a federal executive branch agency head to withhold from public disclosure information the head of the agency determines would be detrimental to national security, homeland security, or public safety if released publicly. Under this provision, the head of the executive agency would determine whether public disclosure of certain information would reveal classified national security information or other information for which there is a legal basis for nondisclosure (such as an exemption from disclosure under the Freedom of Information Act) and such public disclosure would be detrimental to national security, homeland se-

curity, or public safety. The head of an executive branch agency should follow the same procedures with regard to information held by a licensee of non-federal spectrum that has entered into a service arrangement with an executive branch agency or otherwise allows the executive agency access to non-federal spectrum for governmental purposes. A licensee of non-federal spectrum seeking to utilize the national security mechanisms of this subsection must seek invocation of this exception from the appropriate executive branch agency with expertise in the core business functions and operations of the licensee.

The agency head must provide to the NTIA the publicly releasable information, a summary description of the information being withheld from public disclosure, and an annex that will be provided to Congress containing the information to be withheld from public disclosure. The agency head must also include descriptions of the activities, capabilities, functions, or missions supported by the information being withheld. A licensee of non-federal spectrum may also seek a waiver from the FCC for the purpose of withholding from public disclosure information that would be detrimental to public safety or the disclosure of which is otherwise prohibited by law, but the licensee must justify the exemption before the FCC and shall provide clear and convincing evidence to support such an exemption. The licensee must similarly provide the FCC with a summary and annex that will be provided to Congress.

Under new section 119(e)(4), prior to the release of the inventory, the inventory reports to Congress, or the updates to the inventory, the NTIA and the FCC are required to consult with the National Security Council for a period not to exceed 30 days. The Committee intends for this review process to allow the National Security Council to determine whether the release of aggregated information required for the spectrum inventory, subsequent reports to Congress, or updates might disclose information publicly that would be detrimental to national security, homeland security, or public safety. In consulting with the National Security Council, the NTIA and the FCC shall follow the national security procedures established elsewhere in subsection (e) for the treatment of any information to be classified or withheld under (e)(4). The Committee expects any such review by the National Security Council to be completed within the statutorily prescribed 30-day period.

It is the intention of the Committee that any release of classified information provided to the NTIA and Congress under subsection (e) will adhere to well-established procedures regarding the treatment of classified information. It is the intention of the Committee that only individuals with the appropriate security clearances will have access to such information.

In preparing the spectrum inventory and any recommendations about future spectrum reallocations, the NTIA and the FCC should take into account the critical importance of spectrum to the military during training and operations and during conflicts, and should consider that spectrum is vital to mission effectiveness. The NTIA and the FCC should also recognize that spectrum is fundamental to the range of military operations, and spectrum availability is essential to existing and emerging technologies in electronic warfare, network-centric operations, communications systems, satellite resources, and multi-spectral sensors.

New section 119(f) instructs the NTIA and the FCC to continue to follow their rules and practice regarding the protection of confidential and proprietary information in implementing this Act. This provision also clarifies that nothing in this subsection shall be construed to compel the FCC to make publicly available any confidential or proprietary information. The Committee recognizes that compiling data pursuant to this Act may involve the use of competitively sensitive, confidential, or proprietary information. It therefore expects that the NTIA and the FCC will take all necessary steps to protect from disclosure any information that has been or is submitted to them on a confidential basis and to which the agencies' existing rules and practice would afford protection from public disclosure. The NTIA and the FCC should also ensure that no such information is disclosed on the centralized portal or Web site. Thus, pursuant to new subsection (f), submission of confidential or proprietary information by a non-federal user would be governed by the Commission's existing rules and practice applicable to such information.

EXPLANATION OF AMENDMENT

During full Committee consideration of H.R. 3125, an amendment in the nature of a substitute was offered by Subcommittee Chairman Boucher. This substitute amendment was adopted by a voice vote. Among other changes, the substitute amendment (1) separates the relocation recommendations of the NTIA and the FCC from the biennial inventory report and creates a separate quadrennial report for such recommendations; (2) moves the cost-benefit analysis required of the NTIA and the FCC for not expanding the inventory to 10 GHz until the third inventory report; (3) specifies that the inventory update and maintenance requirement shall occur on a quarterly basis, rather than every time a license changes hands; and (4) changes the national security section to remove the "national security" and "homeland security" exemptions from the FCC waiver process and to require the agencies to consult with the National Security Council prior to any public release of the information. The agencies may seek exemptions based on national security, homeland security, and public safety not only for information held by the agencies, but also for information held by licensees of non-federal spectrum.

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (new matter is printed in *italic* and existing law in which no change is proposed is shown in roman):

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION ORGANIZATION ACT

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TITLE I—NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

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PART B—TRANSFER OF AUCTIONABLE FREQUENCIES

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SEC. 119. SPECTRUM INVENTORY.

(a) *RADIO SPECTRUM INVENTORY.*—*In order to promote the efficient use of the electromagnetic spectrum, the NTIA and the Commission shall coordinate and carry out each of the following activities not later than 1 year after the date of enactment of this section:*

(1) *Except as provided in subsection (e), create an inventory of each radio spectrum band of frequencies listed in the United States Table of Frequency Allocations, from 225 megahertz to, at a minimum, 3.7 gigahertz, and to 10 gigahertz unless the NTIA and the Commission determine that the burden of expanding the inventory outweighs the benefit, that includes—*

(A) *the radio services authorized to operate in each band of frequencies;*

(B) *the identity of each Federal or non-Federal user within each such radio service authorized to operate in each band of frequencies;*

(C) *the activities, capabilities, functions, or missions (including whether such activities, capabilities, functions, or missions are space-based, air-based, or ground-based) supported by the transmitters, end-user terminals or receivers, or other radio frequency devices authorized to operate in each band of frequencies;*

(D) *the total amount of spectrum, by band of frequencies, assigned or licensed to each Federal or non-Federal user (in percentage terms and in sum) and the geographic areas covered by their respective assignments or licenses;*

(E) *the approximate number of transmitters, end-user terminals or receivers, or other radio frequency devices authorized to operate, as appropriate to characterize the extent of use of each radio service in each band of frequencies;*

(F) *an approximation of the extent to which each Federal or non-Federal user is using, by geography, each band of frequencies, such as the amount and percentage of time of use, number of end users, or other measures as appropriate to the particular band and radio service; and*

(G) *to the greatest extent possible—*

(i) *contour maps or other information that illustrate the coverage area, receiver performance, and other parameters relevant to an assessment of the availability of spectrum in each band;*

(ii) *for each band or range of frequencies, the identity of each entity offering unlicensed services and the types and approximate number of unlicensed intentional ra-*

diators verified or certified by the Commission that are authorized to operate; and

(iii) for non-Federal users, any commercial names under which facilities-based service is offered to the public using the spectrum of the non-Federal user, including the commercial names under which the spectrum is being offered through resale.

(2) Except as provided in subsection (e), create a centralized portal or Web site to make the inventory of the bands of frequencies required under paragraph (1) available to the public.

(b) *USE OF AGENCY RESOURCES.*—In creating the inventory described in subsection (a)(1), the NTIA and the Commission shall first use agency resources, including existing databases, field testing, and recordkeeping systems, and only request information from Federal and non-Federal users if such information cannot be obtained using such agency resources.

(c) *REPORTS.*—

(1) *IN GENERAL.*—Except as provided in subsection (e), not later than 2 years after the date of enactment of this section and biennially thereafter, the NTIA and the Commission shall submit a report to the Committee on Commerce, Science, and Transportation of the Senate and to the Committee on Energy and Commerce of the House of Representatives containing—

(A) the results of the inventory created under subsection (a)(1), including any update to the information in the inventory pursuant to subsection (d);

(B) a description of any information the NTIA or the Commission determines is necessary for such inventory but that is unavailable; and

(C) a description of any information not provided by any Federal or non-Federal user in accordance with subsections (e)(1)(B)(ii) and (e)(2)(C)(ii).

(2) *RELOCATION REPORT.*—

(A) *IN GENERAL.*—Except as provided in subsection (e), the NTIA and the Commission shall submit a report to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives containing a recommendation of which spectrum, if any, should be reallocated or otherwise made available for shared access and an explanation of the basis for that recommendation.

(B) *DEADLINES.*—The report required under subparagraph (A) shall be submitted not later than 4 years after the date of enactment of this section and every 4 years thereafter.

(3) *INVENTORY REPORT.*—If the NTIA and the Commission have not conducted an inventory under subsection (a) to 10 gigahertz at least 90 days before the third report required under paragraph (1) is submitted, the NTIA and the Commission shall include an evaluation in such report and in every report thereafter of whether the burden of expanding the inventory to 10 gigahertz outweighs the benefit until such time as the NTIA and the Commission have conducted the inventory to 10 gigahertz.

(d) *MAINTENANCE AND UPDATING OF INFORMATION.*—After the creation of the inventory required by subsection (a)(1), the NTIA and the Commission shall make all reasonable efforts to maintain and update the information required under such subsection on a quarterly basis, including when there is a transfer or auction of a license or a change in a permanent assignment or license.

(e) *NATIONAL SECURITY AND PUBLIC SAFETY INFORMATION.*—

(1) *NONDISCLOSURE.*—

(A) *IN GENERAL.*—If the head of an executive agency of the Federal Government determines that public disclosure of certain information held by that agency or a licensee of non-Federal spectrum and required by subsection (a), (c), or (d) would reveal classified national security information or other information for which there is a legal basis for non-disclosure and such public disclosure would be detrimental to national security, homeland security, or public safety, the agency head shall notify the NTIA of that determination and shall include descriptions of the activities, capabilities, functions, or missions (including whether they are space-based, air-based, or ground-based) supported by the information being withheld.

(B) *INFORMATION PROVIDED.*—The agency head shall provide to NTIA—

(i) the publicly releasable information required by subsection (a)(1);

(ii) to the maximum extent practicable, a summary description, suitable for public release, of the classified national security information or other information for which there is a legal basis for nondisclosure; and

(iii) a classified annex, under appropriate cover, containing the classified national security information or other information for which there is a legal basis for nondisclosure that the agency head has determined must be withheld from public disclosure.

(2) *PUBLIC SAFETY NONDISCLOSURE.*—

(A) *IN GENERAL.*—If a licensee of non-Federal spectrum determines that public disclosure of certain information held by that licensee and required to be submitted by subsection (a), (c), or (d) would reveal information for which public disclosure would be detrimental to public safety, or the licensee is otherwise prohibited by law from disclosing the information, the licensee may petition the Commission for a partial or total exemption from inclusion on the centralized portal or Web site under subsection (a)(2) and in the report required by subsection (c).

(B) *BURDEN.*—The licensee seeking an exemption under this paragraph bears the burden of justifying the exemption and shall provide clear and convincing evidence to support such an exemption.

(C) *INFORMATION REQUIRED.*—If an exemption is granted under this paragraph, the licensee shall provide to the Commission—

(i) the publicly releasable information required by subsection (a)(1) for the inventory;

(ii) to the maximum extent practicable, a summary description, suitable for public release, of the information for which public disclosure would be detrimental to public safety or the licensee is otherwise prohibited by law from disclosing; and

(iii) an annex, under appropriate cover, containing the information that the Commission has determined should be withheld from public disclosure.

(3) *ADDITIONAL DISCLOSURE.*—The annexes required under paragraphs (1)(B)(iii) and (2)(C)(iii) shall be provided to the congressional committees listed in subsection (c), but shall not be disclosed to the public under subsection (a) or subsection (d) or provided to any unauthorized person through any other means.

(4) *NATIONAL SECURITY COUNCIL CONSULTATION.*—Prior to the release of the inventory under subsection (a), any updates to the inventory resulting from subsection (d), or the submission of a report under subsection (c)(1), the NTIA and the Commission shall consult with the National Security Council for a period not to exceed 30 days for the purposes of determining what additional information, if any, shall be withheld from the public.

(f) *PROPRIETARY INFORMATION.*—In creating and maintaining the inventory, centralized portal or Web site, and reports under this section, the NTIA and the Commission shall follow their rules and practice regarding confidential and proprietary information. Nothing in this subsection shall be construed to compel the Commission to make publicly available any confidential or proprietary information.

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