

## Calendar No. 309

111TH CONGRESS  
*2d Session*

SENATE

REPORT  
111-159

### RADIO SPECTRUM INVENTORY ACT

REPORT

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND  
TRANSPORTATION

ON

S. 649



MARCH 9, 2010.—Ordered to be printed

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED ELEVENTH CONGRESS

SECOND SESSION

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### RADIO SPECTRUM INVENTORY ACT

MARCH 9, 2010.—Ordered to be printed

Mr. ROCKEFELLER, from the Committee on Commerce, Science, and Transportation, submitted the following

### REPORT

[To accompany S. 649]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 649) to require an inventory of radio spectrum bands managed by the National Telecommunications and Information Administration (NTIA) and the Federal Communications Commission (FCC), having considered the same, reports favorably thereon with an amendment (in the nature of a substitute) and recommends that the bill (as amended) do pass.

#### PURPOSE OF THE BILL

The purpose of S. 649, the Radio Spectrum Inventory Act, as reported, is to require the NTIA and the FCC to biennially inventory how the spectrum each agency manages is utilized and to make this information available to the public.

#### BACKGROUND AND NEEDS

Radio spectrum is a scarce, but valuable resource. As an increasing amount of the nation's communications migrates to wireless formats, it is important to survey how spectrum is presently allocated and used. Doing so will help policymakers identify ways to develop more efficient uses of spectrum in order to expand wireless service for new and innovative uses for consumers, businesses, and the government.

The NTIA is the Executive Branch agency principally responsible for domestic and international telecommunications and information policy. It is specifically charged with managing the Federal government's use of radio spectrum. The FCC is an independent government agency established by the Communications Act of 1934,

charged with regulating interstate and international communications. It is responsible for both auctioning and licensing spectrum that is identified for commercial and non-commercial uses that do not involve the Federal government. By sharing responsibility for inventorying existing spectrum users and licensees, the NTIA and the FCC will be able to develop a comprehensive picture of spectrum use in this country.

#### SUMMARY OF PROVISIONS

S. 649, the Radio Spectrum Inventory Act, would amend the Communications Act of 1934 to require the NTIA and the FCC, in consultation with the Office of Science and Technology Policy, to biennially inventory each radio spectrum band managed by the NTIA and the FCC, at a minimum, between 300 megahertz and 3.5 gigahertz, including information on the licenses or government users assigned in the band, the total spectrum allocation of each licensee or government user, the number of deployed international and end-user intentional radiators, and, if available, additional information.

The bill would require the NTIA and the FCC to create a centralized portal or website to make the inventory of the bands available to the public via an Internet-accessible website. The bill would direct the agencies to make all necessary efforts to maintain and update the portal or website in near real-time fashion and whenever there is a transfer or auction of licenses or change in allocation or assignment.

The bill also would allow a commercial licensee or government user to petition the agencies for a partial or total exemption from being included in the information posted on the Internet. The bill would instruct the NTIA or the FCC to grant such an exemption only to the extent that the agency determines that disclosure of the information would be harmful to national security.

#### LEGISLATIVE HISTORY

The Radio Spectrum Inventory Act (S. 649) was introduced by Senators Kerry, Snowe, Bill Nelson, and Wicker on March 19, 2009, and referred to the Senate Committee on Commerce, Science, and Transportation. The bill is also cosponsored by Senators Hutchison, Klobuchar, Pryor, Thune, and Warner. On July 8, 2009, the Committee considered the bill in an open Executive Session. The Committee adopted an amendment in the nature of a substitute and ordered the bill reported by voice vote.

#### ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

JULY 28, 2009.

Hon. JOHN D. ROCKEFELLER IV,  
*Chairman, Committee on Commerce, Science, and Transportation,  
U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 649, 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.

*S. 649—Radio Spectrum Inventory Act*

**Summary:** S. 649 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 180 days 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 S. 649 would cost \$22 million over the 2010–2014 period, assuming appropriation of the necessary amounts. CBO estimates that enacting S. 649 would not affect direct spending or revenues.

S. 649 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 S. 649 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—					
	2010	2011	2012	2013	2014	2010–2014
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Estimated Authorization Level .....	8	4	4	4	4	24
Estimated Outlays .....	6	4	4	4	4	22

**Basis of estimate:** For this estimate, CBO assumes the bill will be enacted near the end of fiscal year 2009 and that the necessary amounts will be appropriated each year.

S. 649 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 180 days of enactment of the bill and would be updated at least every two years. The bill also would require the agencies to make the results of the inventory available to the public on the Internet and to update that information as changes occur.

Based on information from NTIA and FCC, CBO estimates that implementing S. 649 would cost \$22 million over the 2010–2014 pe-

riod, assuming appropriation of the necessary amounts. Most of that cost would be incurred to update the databases that track information about the users of each spectrum band and to develop an Internet-based system to present up-to-date information to the public.

**Intergovernmental and private-sector impact:** S. 649 contains no intergovernmental or private-sector mandates as defined in UMRA and would not affect the budgets of state, local, or tribal governments.

**Estimate prepared by:** Federal costs: Susan Willie; Impact on state, local, and tribal governments: Elizabeth Cove Delisle; Impact on the private sector: Jacob Kuipers.

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

#### REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported:

#### NUMBER OF PERSONS COVERED

S. 649 would require the NTIA and the FCC to conduct an inventory of the license holders and users of certain frequencies of the radio broadcast spectrum. The bill affects businesses and individuals who are license holders in such spectrum bands.

#### ECONOMIC IMPACT

S. 649 would not have an adverse impact on the nation's economy.

#### PRIVACY

The reported bill would not have an adverse impact on the personal privacy of U.S. citizens.

#### PAPERWORK

The reported bill should not significantly increase paperwork requirements for individuals or businesses, although it may be necessary for the FCC to request additional information from license holders to conduct the report required by the bill.

#### CONGRESSIONALLY DIRECTED SPENDING

In compliance with paragraph 4(b) of rule XLIV of the Standing Rules of the Senate, the Committee provides that no provisions contained in the bill, as reported, meet the definition of congressionally directed spending items under the rule.

#### SECTION-BY-SECTION ANALYSIS

##### *Section 1. Short title.*

Section 1 would provide that the legislation may be cited as the Radio Spectrum Inventory Act.

*Section 2. Spectrum Inventory.*

Section 2 would amend Part I of Title III of the Communications Act of 1934 by adding a new section 342.

New subsection 342(a)(1) would require the NTIA and the FCC to conduct a report that includes an inventory of each radio spectrum band, at a minimum, from 300 megahertz to 3.5 gigahertz, managed by each agency.

New subsections 342(a)(1)(A)–(C) would specify that the report should include the licenses or government users assigned to the band, the total spectrum allocation, by band, of each licensee or government user in percentage and in total, and the number of intentional radiators and end-user intentional radiators that have been deployed in the band with each license or government user.

New subsection 342(a)(1)(D) also would direct the FCC and NTIA to include in the report, if such information is available, the type of intentional radiators operating in the band, the type of unlicensed intentional radiators authorized to operate in the band, contour maps that illustrate signal coverage and strength, and the approximate geo-location of base stations or fixed transmitters.

New subsection 342(a)(2) would require the NTIA and the FCC to create a centralized portal or website and make the inventory of the spectrum bands available to the public via an Internet-accessible website.

New subsection 342(a)(3) would require the NTIA and the FCC to continue to maintain and update the publicly-available information in near real-time fashion and whenever there is a transfer or auction of licenses or change in allocation or assignment.

New subsection 342(a)(4) would require the NTIA and the FCC to submit the report to the Senate Committee on Commerce, Science, and Transportation and the House Committee on Energy and Commerce.

New subsection 342(b) would allow a licensee or government user of spectrum to petition the NTIA or the FCC for a partial or total exemption from inclusion on the website and in the report required by subsection (a). New subsection 342(b) would instruct the NTIA or the FCC to grant such an exemption only to the extent that the agency determines that disclosure of the information would be harmful to national security. New subsection 342(b) also would specify that any such exemption shall expire after two years unless the licensee or government user seeks and obtains an extension. New subsection 342(b) would further require that any information that is excluded from public disclosure pursuant to an exemption be compiled and reported to the committees of Congress described in subsection (a)(4) on a confidential basis.

## CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new material is printed in italic, existing law in which no change is proposed is shown in roman):

### COMMUNICATIONS ACT OF 1934

[47 U.S.C. 301 et seq.]

#### **SEC. 342. SPECTRUM INVENTORY.**

(a) **RADIO SPECTRUM INVENTORY.**—*Not later than 180 days after the date of enactment of this section, and biennially thereafter, the National Telecommunications and Information Administration and the Federal Communications Commission, in consultation with the Office of Science and Technology Policy, shall carry out each of the following activities:*

(1) *Conduct a report that includes an inventory of each radio spectrum band, at a minimum, from 300 Megahertz to 3.5 Gigahertz, managed by each such agency. Such report shall include—*

(A) *the licenses or government user assigned in the band;*  
 (B) *the total spectrum allocation, by band, of each licensee or government user (in percentage terms and in sum);*

(C) *the number of intentional radiators and end-user intentional radiators that have been deployed in the band with each license or government user; and*

(D) *if such information is available—*

(i) *the type of intentional radiators operating in the band;*

(ii) *the type of unlicensed intentional radiators authorized to operate in the band;*

(iii) *contour maps that illustrate signal coverage and strength; and*

(iv) *the approximate geo-location of base stations or fixed transmitters.*

(2) *Create a centralized portal or website utilized by each such agency to make the inventory of the bands of such agency available to the public via an Internet-accessible website.*

(3) *Make all necessary efforts to maintain and update the information required under paragraph (2) in near real-time fashion and whenever there is a transfer or auction of licenses or change in allocation or assignment.*

(4) *Submit the report required under paragraph (1) to the Committee on Commerce, Science, and Transportation of the Senate and to the Committee on Energy and Commerce of the House of Representatives.*

(b) **NATIONAL SECURITY EXEMPTION.**—*A licensee or government user of spectrum may petition the Commission or the National Telecommunications and Information Administration for a partial or total exemption from inclusion on the website and in the report required by subsection (a). Such an exemption may be granted only to the extent that each such agency determines that disclosure of*

*such information would be harmful to the national security of the United States. The licensee or government user seeking an exemption under this subsection bears the burden of justifying the exemption and shall provide clear and convincing evidence to support such an exemption. Any such exemption shall apply only for 2 years and shall expire upon the end of such 2-year period unless the licensee or government user seeks and obtains an extension in accordance with this subsection. Any information that is excluded from public disclosure pursuant to this subsection shall still be compiled and reported to the Committees of Congress described in subsection (a)(4) on a confidential basis.*

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