

ONE HUNDRED ELEVENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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WASHINGTON, DC 20515-6115

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MEMORANDUM

March 8, 2010

To: Members of the Committee on Energy and Commerce

Fr: Committee on Energy and Commerce Democratic Staff

Re: Committee Markup of H.R. 3125, the Radio Spectrum Inventory Act; H.R. 3019, the Spectrum Relocation Improvement Act of 2009; and H.R. 1258, the Truth in Caller ID Act of 2009

On Wednesday, March 10, 2010, at 10:00 a.m. in room 2123 of the Rayburn House Office Building, the Committee will meet in open markup session to consider **H.R. 3125**, the Radio Spectrum Inventory Act; **H.R. 3019**, the Spectrum Relocation Improvement Act of 2009; and **H.R. 1258**, the Truth in Caller ID Act of 2009.

I. H.R. 3125, THE RADIO SPECTRUM INVENTORY ACT

A. Background

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

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) (Jun. 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) (Jun. 8, 2009).

inadequate to meet the rapidly growing demand for wireless services.⁴ That view has been echoed by Federal Communications Commission (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 During its preparation of the pending National Broadband Plan required by Congress, the FCC has issued several notices seeking comment on current spectrum use and the need for additional spectrum to meet the demand for wireless broadband services.⁶ According to Chairman Genachowski, “[t]he National Broadband Plan will set a goal of freeing up 500 Megahertz of spectrum over the next decade.”⁷

To provide policymakers with greater transparency concerning current uses of spectrum and the availability of spectrum for new and innovative services, Chairman Waxman, Subcommittee Chairman Boucher, Ranking Members Barton and Stearns, and several other Energy and Commerce Committee members introduced H.R. 3125, the Radio Spectrum Inventory Act, in July 2009.

The Subcommittee on Communications, Technology, and the Internet held a legislative hearing on H.R. 3125 on December 15, 2009. On January 21, 2010, the Subcommittee met in open markup session and favorably forwarded H.R. 3125 to the full Committee, amended, by a voice vote.

At the markup, an amendment in the nature of a substitute is expected to be offered that makes changes to the bill based on ongoing discussions about this legislation.

B. Section-by-Section Summary of H.R 3125, as Forwarded Favorably by the Subcommittee on Communications, Technology, and the Internet

Section 1. Short Title. This Act is entitled the “Radio Spectrum Inventory Act”.

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) (Jun. 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).

⁶ See *Comment Sought on Spectrum for Broadband*, GN Dockets 09-47, 09-51, 09-137, NBP Public Notice #6, DA 09-2100 (Sept. 23, 2009) (online at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-09-2100A1.pdf). See also *Data Sought on Uses of Spectrum*, GN Dockets 09-47, 09-51, 09-137, NBP Public Notice #26, DA 09-2518 (Dec. 2, 2009) (online at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-09-2518A1.pdf).

⁷ Prepared Remarks of Chairman Julius Genachowski, Federal Communications Commission, *Mobile Broadband: A 21st Century Plan for U.S. Competitiveness, Innovation and Job Creation* (Feb. 24, 2010)(online at <http://www.fcc.gov/commissioners/genachowski/speeches2010.html>).

Section 2(a). Radio Spectrum Inventory. Amends the National Telecommunications and Information Administration Organization Act to require the National Telecommunications Information Administration (NTIA) and the FCC to develop an inventory of each spectrum band in the U.S. Table of Frequency Allocations from 225 megahertz to 3.7 Gigahertz, and from 3.7 Gigahertz to 10 Gigahertz if the NTIA and the FCC determine that the burden of expanding the inventory doesn't outweigh the benefits. The inventory shall include (1) the types of 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, (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 website to make the inventory available to the public.

Section 2(b). Use of Agency Resources. Directs the FCC and the NTIA to first use agency resources before obtaining information needed to complete the inventory from federal and non-federal users.

Section 2(c). Reports. Directs the NTIA and the FCC to provide reports to the House Committee on Energy and Commerce and the Senate Committee on Commerce, Science, and Transportation biennially, commencing two years after the date of enactment. These reports shall contain: (1) the results of the inventory; (2) a description of any information that the NTIA or the FCC determines is necessary for the inventory but was not made available; (3) a description of any information that was not made available for the inventory due to the national security provisions of the Act; (4) a recommendation of which spectrum, if any, should be reallocated or otherwise made available for shared access, and (5) an evaluation of whether to expand the inventory to 10 Gigahertz.

Section 2(d). Maintenance and Updating of Information. Directs the NTIA and the FCC to maintain and update the information in the inventory whenever there is a transfer or auction of a license or a change in an allocation or assignment.

Section 2(e). National Security. Provides a mechanism for federal agencies to notify the NTIA and withhold certain information if the head of such executive agency determines that disclosure would be detrimental to national security, homeland security, or public safety. The agency head must provide to the NTIA publicly releasable information, a summary description of the information being withheld, and an annex

containing the withheld information to be provided to Congress. A waiver process is provided to licensees of non-federal spectrum if the information is determined to be detrimental to national security, homeland security, or public safety.

Section 2(f). Proprietary Information. Instructs the NTIA and the FCC to continue to follow their rules and practices regarding the protection of confidential and proprietary information in implementing the Act. Also clarifies that nothing in this subsection shall be construed to compel the FCC to make publicly available any confidential or proprietary information.

II. H.R. 3019, THE SPECTRUM RELOCATION IMPROVEMENT ACT OF 2009

A. Background

In 2002, the NTIA and the FCC issued a report recommending the transfer of spectrum in the 1710-1755 MHz bands from the federal government to the private sector through an auction.⁸ The bands were identified as suitable for advanced wireless broadband services (advanced wireless services, or AWS). In the report, the agencies identified the need to create a spectrum relocation fund from auction proceeds that would allow affected federal agencies to recover costs associated with agency relocation to other spectrum.

To accomplish that goal, Congress in 2004 passed the Commercial Spectrum Enhancement Act.⁹ In 2006, the FCC conducted an auction for spectrum in the 1710-1755 bands to be used for AWS. The auction netted \$13.7 billion, exceeding the \$2.06 billion reserve price set by the FCC.¹⁰ The auction also raised enough funds to meet the NTIA's estimate of \$936 million that would be necessary to pay the relocation costs of federal users.¹¹

The relocation of federal users involved 12 federal agencies and more than 1,900 NTIA-issued federal frequency assignments.¹² Several agencies were given up to six

⁸ National Telecommunications and Information Administration, *An Assessment of the Viability of Accommodating Advanced Mobile Wireless (3G) Systems in the 1710-1770 MHz and 2110-2170 MHz Band* (July 22, 2002) (online at <http://www.fcc.gov/3G/3Gva072202.pdf>).

⁹ Pub. L. 108-494 (2004).

¹⁰ See Federal Communications Commission, *FCC's Advanced Wireless Services (AWS) Spectrum Auction Concludes*, FCC News (Sept. 18, 2006) (online at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-267467A1.pdf).

¹¹ See National Telecommunications and Information Administration, *Spectrum Relocation and Cost Summary* (Jun. 14, 2006) (online at http://www.ntia.doc.gov/osmhome/reports/specrelo/pdf_20060614/1710_1755_Relo_Costs_061406.pdf). The cost estimate was revised upward to \$1.008 billion in 2007.

¹² See Office of Management and Budget, *Commercial Spectrum Enhancement Act Report to Congress on Agency Plans for Spectrum Relocation Funds* (Feb. 16, 2007)

years to complete the relocation. Although the Office of Management and Budget had initially established a timeline and cost estimates for each agency, they were periodically revised throughout 2007 and 2008 due to unforeseen circumstances, incurring additional costs and causing further delay.¹³

Winners of the AWS licenses have complained that the existing spectrum auction processes and reporting requirements do not fully account for the size and complexity of federal relocation efforts, thereby delaying the rollout of advanced wireless services and preventing auction winners from using their spectrum in a timely manner.

In June 2009, Reps. Jay Inslee, Fred Upton, and Chairman Rick Boucher introduced H.R. 3019, the Spectrum Relocation Improvement Act of 2009, which would improve the process of clearing federal users from spectrum that has been reallocated and auctioned for commercial use.

The Subcommittee on Communications, Technology, and the Internet held a legislative hearing on H.R. 3019 on December 15, 2009. On January 21, 2010, the Subcommittee met in open markup session and favorably forwarded H.R. 3019 to the full Committee by a voice vote.

B. Section-by-Section Summary of H.R. 3019, as Forwarded Favorably by the Subcommittee on Communications, Technology, and the Internet

Section 1. Short Title. This Act is entitled the “Spectrum Relocation Improvement Act of 2009”.

Section 2(a). Eligible Federal Entities. Specifies the eligibility criteria for federal entities subject to the Act.

Section 2(b). Public Information on Relocation Process. Requires the NTIA to make available publicly the transition plan of each federal entity to be relocated after a spectrum auction. The plan must include detailed information about current use, geographic location, and frequency bands of the spectrum, as well as an outline of the steps the federal user will take to relocate. Each transition plan must be evaluated by a three-member technical panel, which must report to the NTIA and to the federal entity on the sufficiency of the plan, including whether the proposed timelines and estimated relocation costs are reasonable. This section also provides a procedure for the treatment of any information considered “classified.”

(online at http://www.ntia.doc.gov/reports/2007/OMBSpectrumRelocationCongressionalNotification_final.pdf).

¹³ See U.S. Department of Commerce, *Relocation of Federal Radio Systems From the 1710-1755 MHz Spectrum Band Second Annual Progress Report* (Mar. 2009) (online at <http://www.ntia.doc.gov/osmhome/reports/Final2ndAnnualRelocationReport20090416.pdf>).

Section 2(c). Sharing and Coordination of Spectrum between Commercial Licensees and Federal Entities during Relocation Transition. Clarifies that to be eligible to receive payment for relocation costs from the Spectrum Relocation Fund, a federal entity must, in its transition plan, provide for the sharing and coordination of eligible frequencies with commercial licensees during the transition period, including the provision of appropriate security clearances. To be eligible for funding, a federal entity must also complete its relocation within one year. This section specifies a dispute resolution process regarding disagreements over the execution, timing, or cost of the federal entity's transition plan

III. H.R. 1258, THE TRUTH IN CALLER ID ACT OF 2009

A. Background

Caller identification (caller ID) is a service offered by most telephone companies for a fee that allows phone calls to be identified with the name and number of the incoming call if the information has not been blocked. The traditional telephone system operates through a signaling system (Signaling System 7 or SS7) that connects calls. SS7 allows a caller to connect with someone through an exchange. To connect the caller with the person she is calling, the exchange is required by law to transmit a calling party number, which includes the caller's name and phone number, as well as whether the caller wants this information blocked to a person receiving the call. Callers can protect their privacy on a per-call basis by dialing *67 before a phone call is made.

Voice over internet protocol (VoIP) is a service that allows users to make telephone calls over an Internet connection. Although it functions the same as a telephone call, this service has typically not been subject to the same regulatory treatment as traditional telephony. Some VoIP providers allow consumers to change the caller ID information that is transmitted once a call is made, while others do not.

H.R. 1258 would protect against a practice commonly referred to as caller ID "spoofing," where a caller falsifies the original caller ID information during the transmission of a phone call. Typically, caller ID spoofing will involve a caller changing the number that would show on the call recipient's caller ID when a call is placed. Spoofing has been possible for years but generally required expensive equipment to change the outgoing call information. With the growth of VoIP, spoofing has become easier and less expensive to execute. A number of Internet web sites now offer spoofing services, as well as other tools such as voice scrambling services.

The proliferation of these technologies and services means that individuals and entities that wish to deceive others through caller ID manipulation can do so with relative ease. Spoofing threatens a number of business applications, including credit card verification and automatic call routing, because these systems rely on the telephone number as one piece of their verification and authentication process. At other times, however, spoofing may be utilized to protect consumers. For example, domestic violence shelters sometimes use spoofing to mask the identity of the caller for protective purposes.

The FCC has launched investigations into spoofing by telemarketers. One such investigation, involving a company called Intelligent Alternatives, resulted in a citation for violation of the FCC's rules.¹⁴ Through its "Do-Not-Call" regulations, the FCC also has required that telemarketers transmit caller ID information and has prohibited telemarketers from withholding caller ID information. There is no broad mandate, however, that the correct caller ID information be transmitted.

Rep. Engel and Ranking Member Barton introduced H.R. 1258, the Truth in Caller ID Act, on March 3, 2009. (Identical legislation passed the House by a voice vote during the 109th and 110th Congresses.)

The Subcommittee on Communications, Technology, and the Internet met in open markup session on October 8, 2009, and favorably forwarded H.R. 1258, amended, to the full Committee by a voice vote.

B. Section-by-Section Summary of H.R. 1258, as Forwarded by the Subcommittee on Communications, Technology, and the Internet

Section 1. Short Title.

The short title of the bill is the "The Truth in Caller ID Act of 2009".

Section 2. Prohibition Regarding Manipulation of Caller Identification Information.

Section 2 adds a new subsection (e) to section 227 of the Communications Act. Subsection (e)(1) makes it unlawful for any person, in connection with any real-time voice telecommunications service, regardless of technology, to cause any caller identification service to transmit misleading or inaccurate caller ID information with the intent to defraud or cause harm. Subsection (e)(2) ensures that nothing in the bill prevents or restricts any person from blocking caller identification information. Subsection (e)(3) requires the FCC to prescribe regulations within six months of enactment and to consider whether related regulations should be revised to require non-commercial calls to residential telephone lines using an artificial or pre-recorded voice to deliver a message to transmit called ID information that is not misleading or inaccurate.

Subsection (e)(4) contains an exception for law enforcement to ensure that lawfully authorized investigations or intelligence activity utilizing spoofing will remain permissible after enactment.

Subsection (e)(5) clarifies that the bill will not alter the application of the FCC's regulations issued pursuant to the Telephone Consumer Protection Act of 1991.

¹⁴ Letter from Kurt Schroeder, Deputy Chief, Telecommunications Consumers Division, Enforcement Bureau, Federal Communications Commission, to James Southworth, Intelligent Alternatives (June 11, 2007) (online at http://fjallfoss.fcc.gov/edocs_public/attachmatch/DOC-288426A1.pdf).

Subsection (e)(6) contains the definitions of “caller ID information” and “caller ID service”. Caller ID information is defined as any information provided to an end user by a caller ID service regarding the name or telephone number of the caller or other information regarding the origination of a call using “any real time voice communications service, regardless the technology or network utilized.”

Caller ID service means any service or device designed to provide the user of the service or device with the name or telephone number of the caller or other information regarding the origination of a call made using any real time voice communications service, regardless of the technology or network utilized.

At the markup, it is expected that an amendment in the nature of a substitute will be offered that makes changes to the bill based on ongoing discussions about this legislation.