

111TH CONGRESS  
2D SESSION

# S. 3731

To require the National Telecommunications and Information Administration to conduct a competition to award grants for the development of nonstationary radio over Internet protocol devices that support mission-critical broadband voice and data communications of public safety personnel, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

AUGUST 5, 2010

Mr. WARNER (for himself and Mr. WICKER) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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## A BILL

To require the National Telecommunications and Information Administration to conduct a competition to award grants for the development of nonstationary radio over Internet protocol devices that support mission-critical broadband voice and data communications of public safety personnel, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Next Generation Pub-  
5       lic Safety Device Act of 2010”.

1 **SEC. 2. PUBLIC SAFETY ROIP DEVICE DEVELOPMENT COM-**  
2 **PETITION.**

3 (a) ESTABLISHMENT.—The Assistant Secretary, in  
4 coordination with the Commission, the Director of the Na-  
5 tional Institute of Standards and Technology, and the Di-  
6 rector of the Office of Emergency Communications in the  
7 Department of Homeland Security, shall conduct a com-  
8 petition to award grants to eligible entities for the develop-  
9 ment of nonstationary radio over Internet protocol devices  
10 that support mission-critical broadband voice and data  
11 communications of public safety personnel.

12 (b) WORKING GROUP.—

13 (1) COMPOSITION.—The Assistant Secretary  
14 shall establish a working group composed of—

15 (A) a representative of the Commission,  
16 the Director of the National Institute of Stand-  
17 ards and Technology, and the Director of the  
18 Office of Emergency Communications in the  
19 Department of Homeland Security; and

20 (B) such other public or private stake-  
21 holders with technical expertise in the develop-  
22 ment of emergency communications devices as  
23 the representative of the Commission considers  
24 appropriate.

25 (2) DUTIES.—The working group shall provide  
26 the Assistant Secretary with advice and technical as-

1       sistance in conducting the competition under this  
2       section.

3           (3) SUPPORT SERVICES.—The Assistant Sec-  
4       retary shall provide the working group with the ad-  
5       ministrative, professional, and technical support re-  
6       quired by the working group to carry out its duties.

7           (4) DURATION.—The working group shall ter-  
8       minate not later than the earlier of—

9           (A) the date that is 15 days after the date  
10       of the submission by the Comptroller General of  
11       the United States of the report required by sub-  
12       section (e)(3); or

13          (B) the date that is 6 years after the date  
14       of the enactment of this section.

15       (c) DEVICE REQUIREMENTS.—

16           (1) IN GENERAL.—The Assistant Secretary, in  
17       coordination with the working group, shall establish  
18       requirements for RoIP devices developed, in whole or  
19       in part, using a grant under this section.

20           (2) CONTENT.—The requirements established  
21       under paragraph (1) shall include—

22           (A) an identification of specific commu-  
23       nication needs of public safety personnel and  
24       any corresponding characteristics or capabilities  
25       of the devices for meeting such needs; and

1 (B) such characteristics and capabilities of  
2 the devices as will ensure—

3 (i) delivery of communications in a  
4 real-time manner;

5 (ii) reliability of the delivery of com-  
6 munications under adverse conditions;

7 (iii) sufficient clarity of transmission  
8 to permit public safety personnel to easily  
9 comprehend the content of communica-  
10 tions; and

11 (iv) full interoperability among dif-  
12 ferent types and brands of RoIP devices  
13 used by public safety personnel.

14 (d) GRANT PROCESS.—

15 (1) 3-STAGE PROCESS.—The Assistant Sec-  
16 retary shall establish a 3-stage process for awarding  
17 grants to eligible entities under this section.

18 (2) AWARD OF GRANTS.—The Secretary may  
19 only award a grant in a stage to an eligible entity  
20 that—

21 (A) submits a bid meeting the specifica-  
22 tions developed under paragraph (3) for such  
23 stage;

24 (B) provides the Assistant Secretary with  
25 an assurance that the eligible entity will use

1 grant funds to develop a RoIP device in accord-  
2 ance with the specifications included in such  
3 bid;

4 (C) in the case of a grant in stage 1 or 2  
5 for the development of a device, provides the  
6 Assistant Secretary with an assurance that the  
7 eligible entity will submit in good faith a bid for  
8 a grant in stage 2 or 3, respectively, for the de-  
9 velopment of such device; and

10 (D) in the case of a grant in stage 2 or 3  
11 for the development of a device, has received a  
12 grant in stage 1 or 2, respectively, for the de-  
13 velopment of such device.

14 (3) BID SPECIFICATIONS FOR EACH STAGE.—

15 (A) IN GENERAL.—The Assistant Sec-  
16 retary shall develop specifications for bids sub-  
17 mitted for grants in each stage and shall ensure  
18 that such specifications are—

19 (i) based on the requirements estab-  
20 lished under subsection (c)(1); and

21 (ii) provide for reasonable progress  
22 from stage to stage toward the commercial  
23 production of RoIP devices that meet such  
24 requirements by eligible entities receiving  
25 grants in stage 3.

1 (B) SPECIFICATIONS FOR STAGE 1.—The  
2 specifications for stage-1 bids shall include a re-  
3 quirement that the eligible entity provide the  
4 Assistant Secretary with an assurance that the  
5 eligible entity will use grant funds to develop  
6 the prototype referred to in subparagraph (C)(i)  
7 for submission with the stage-2 bid of the enti-  
8 ty.

9 (C) SPECIFICATIONS FOR STAGE 2.—The  
10 specifications for stage-2 bids shall include the  
11 following:

12 (i) A requirement that the eligible en-  
13 tity submit a prototype of the device being  
14 developed.

15 (ii) A requirement that the eligible en-  
16 tity provide the Assistant Secretary with  
17 an assurance that the eligible entity will  
18 use grant funds to develop the plan re-  
19 ferred to in subparagraph (D)(i) for sub-  
20 mission with the stage-3 bid of the entity  
21 and to prepare to commercially produce  
22 the device in accordance with the plan.

23 (iii) A requirement that the eligible  
24 entity submit such information as the As-  
25 sistant Secretary may require regarding

1 the capability of the eligible entity to com-  
2 mercially produce, distribute, and market  
3 the device.

4 (D) SPECIFICATIONS FOR STAGE 3.—The  
5 specifications for stage-3 bids shall include the  
6 following:

7 (i) A requirement that the eligible en-  
8 tity submit a plan for the commercial pro-  
9 duction of the device by the entity that  
10 demonstrates that the device, as produced,  
11 will meet the requirements established  
12 under subsection (c)(1).

13 (ii) A requirement that the eligible en-  
14 tity provide the Assistant Secretary with  
15 an assurance that the eligible entity will—

16 (I) use grant funds to commer-  
17 cially produce the device in accordance  
18 with the plan submitted under clause  
19 (i); and

20 (II) apply for award of the label  
21 under section 3.

22 (iii) A requirement that the eligible  
23 entity submit such information as the As-  
24 sistant Secretary may require regarding  
25 the capability of the eligible entity to com-

1                   mercially produce, distribute, and market  
2                   the device.

3                   (4) ADDITIONAL FACTORS FOR CONSIDER-  
4                   ATION.—In making a grant under this section, the  
5                   Assistant Secretary shall consider, in addition to the  
6                   requirements established under subsection (c)(1) and  
7                   the bid specifications established under paragraph  
8                   (3) for the stage involved, the following factors:

9                   (A) The extent to which the grant will en-  
10                  courage competition in the market for the de-  
11                  vice being developed.

12                  (B) The estimated cost at which public  
13                  safety personnel will be able to purchase such  
14                  device.

15                  (C) The potential contribution to public  
16                  safety of such device.

17                  (D) Whether such device is capable of uti-  
18                  lizing, in addition to the portions of the electro-  
19                  magnetic spectrum listed in subparagraphs (A)  
20                  and (B) of section 4(8), the following portions  
21                  of the spectrum:

22                         (i) Public Safety Broadband License,  
23                         Guard Band (the electromagnetic spectrum  
24                         between 768 and 769 megahertz, inclusive,



1 and between 798 and 799 megahertz, in-  
2 clusive).

3 (ii) Public Safety, Narrowband Net-  
4 work (the electromagnetic spectrum be-  
5 tween 769 and 775 megahertz, inclusive,  
6 and between 799 and 805 megahertz, in-  
7 clusive).

8 (E) Such other factors as the Assistant  
9 Secretary considers appropriate to promote the  
10 public interest.

11 (5) PRIORITY.—In making a grant under this  
12 section, the Assistant Secretary shall give priority to  
13 bids for the development of devices that are inter-  
14 operable across—

15 (A) multiple commercial bands of the elec-  
16 tromagnetic spectrum; and

17 (B) multiple communications profiles.

18 (6) TIMING.—The Assistant Secretary shall  
19 structure the timing of each stage as the Assistant  
20 Secretary considers appropriate, but the Assistant  
21 Secretary shall release the solicitation for stage-1  
22 bids not later than 8 months after the date of the  
23 enactment of this section and shall ensure that all  
24 grants in stage 3 have been awarded not later than

1       4 years after the date of the award of the 1st grant  
2       in stage 1.

3               (7) NUMBER AND AMOUNT OF GRANTS.—

4                       (A) NUMBER.—

5                               (i) 1 GRANT PER DEVICE PER  
6                               STAGE.—The Assistant Secretary may not  
7                               award more than 1 grant per device per  
8                               stage.

9                               (ii) NUMBER OF STAGE-3 GRANTS.—

10                              The Assistant Secretary shall award not  
11                              fewer than 4 and not more than 7 grants  
12                              in stage 3.

13                       (B) AMOUNT.—

14                               (i) PER STAGE.—A grant for the de-  
15                               velopment of a device may not exceed  
16                               \$4,000,000 per stage.

17                               (ii) PER DEVICE.—The Assistant Sec-  
18                               retary may not award more than a total of  
19                               \$8,000,000 in all 3 stages for the develop-  
20                               ment of a single device.

21               (8) CONSULTATION WITH WORKING GROUP.—

22       The Assistant Secretary shall consult with the work-  
23       ing group in carrying out this subsection.

24       (e) GAO AUDIT.—

1           (1) IN GENERAL.—The Comptroller General of  
2           the United States shall conduct an audit of the com-  
3           petition conducted under this section.

4           (2) FACTORS FOR EVALUATION.—In conducting  
5           such audit, the Comptroller General shall evaluate  
6           the following:

7                   (A) The extent to which grants under this  
8                   section were awarded on the basis of the merits  
9                   of the bids submitted, including whether the re-  
10                  quirements established under subsection (c)(1)  
11                  were sufficient to ensure that the devices devel-  
12                  oped with such grants adequately support mis-  
13                  sion-critical broadband voice and data commu-  
14                  nications of public safety personnel.

15                  (B) The extent to which the grants encour-  
16                  aged competition in the market for the devices.

17                  (C) The effect of the grants on the cost at  
18                  which public safety personnel are able to pur-  
19                  chase the devices.

20                  (D) The contribution to public safety of  
21                  the devices.

22                  (E) Such other factors as the Comptroller  
23                  General considers appropriate.

24           (3) REPORT TO CONGRESS.—Not later than 5  
25           years after the date of the enactment of this section,

1 the Comptroller General shall submit to Congress a  
2 report on the findings of such audit.

3 **SEC. 3. AWARD OF LABEL BY FCC.**

4 (a) IN GENERAL.—The Commission shall establish a  
5 voluntary labeling program to identify nonstationary RoIP  
6 devices that meet such criteria as the Commission con-  
7 siderers appropriate for the support of mission-critical  
8 broadband voice and data communications of public safety  
9 personnel.

10 (b) ESTABLISHMENT OF LABEL.—Under such pro-  
11 gram, the Commission shall determine a name and design  
12 for a label (in this section referred to as the “label”) for  
13 any RoIP device that meets the criteria described in sub-  
14 section (a) and shall take the necessary steps to register  
15 the label as a mark under the Act entitled “An Act to  
16 provide for the registration and protection of trademarks  
17 used in commerce, to carry out the provisions of certain  
18 international conventions, and for other purposes”, ap-  
19 proved March 17, 1946 (commonly referred to as the  
20 Trademark Act of 1946; 15 U.S.C. 1051 et seq.).

21 (c) AWARD OF LABEL.—

22 (1) APPLICATION.—Under the program, the  
23 Commission shall establish a process under which an  
24 entity manufacturing, marketing, or selling a RoIP

1 device may apply for the award of the label for such  
2 device.

3 (2) AWARD.—Upon application for a device  
4 under paragraph (1), the Commission shall award  
5 the label to such device if the Commission deter-  
6 mines that the device meets the criteria described in  
7 subsection (a).

8 (3) EFFECT.—An entity manufacturing, mar-  
9 keting, or selling a RoIP device awarded the label  
10 may display the label and otherwise indicate that the  
11 device has been awarded the label on the device and  
12 in or on any materials accompanying the device or  
13 any advertising with respect to the device.

14 (d) REVISION OF CRITERIA.—The Commission shall  
15 periodically review the criteria described in subsection (a)  
16 and revise the criteria as the Commission considers appro-  
17 priate.

18 (e) ANNUAL COMPLIANCE CERTIFICATION.—

19 (1) IN GENERAL.—An entity displaying or oth-  
20 erwise indicating that a RoIP device has been  
21 awarded the label shall annually certify to the Com-  
22 mission that the device continues to meet the criteria  
23 described in subsection (a), including any revisions  
24 to the criteria since the label was awarded.

1           (2) WITHDRAWAL OF AWARD OF LABEL.—The  
2       Commission shall withdraw the award of the label  
3       with respect to a device if—

4           (A) for a year, a certification required by  
5       paragraph (1) for the device is not submitted  
6       by any of the entities required to submit such  
7       certification; or

8           (B) the Commission otherwise finds that  
9       the device no longer meets the criteria described  
10      in subsection (a), including any revisions to the  
11      criteria since the label was awarded.

12      (f) REGULATIONS.—The Commission may promul-  
13      gate regulations to promote the effective use of the label  
14      and to prevent the misuse of the label.

15      (g) ONLINE DATABASE.—The Commission shall  
16      maintain an electronic database of the devices for which  
17      the award of the label is in effect and shall make such  
18      database publicly available on an appropriate Internet  
19      website.

20      **SEC. 4. DEFINITIONS.**

21      In this Act:

22           (1) ASSISTANT SECRETARY.—The term “Assist-  
23      ant Secretary” means the Assistant Secretary of  
24      Commerce for Communications and Information.

1           (2) BROADBAND.—The term “broadband” has  
2           the same meaning as under the Broadband Tech-  
3           nology Opportunities Program established under sec-  
4           tion 6001 of the American Recovery and Reinvest-  
5           ment Act of 2009 (47 U.S.C. 1305).

6           (3) COMMISSION.—The term “Commission”  
7           means the Federal Communications Commission.

8           (4) COMMUNICATIONS PROFILE.—The term  
9           “communications profile” means a configuration of  
10          technology or equipment that supports broadband  
11          communications by radio through the public  
12          switched telephone network, the Internet, or any  
13          other public network. The radio-air interface con-  
14          figuration used by a particular communications pro-  
15          file is part of such profile and is one of the charac-  
16          teristics that distinguishes such profile from a dif-  
17          ferent communications profile. A communications  
18          profile can be implemented using radio equipment  
19          designed to support specific, fixed profiles or radio  
20          equipment capable of supporting an indefinite num-  
21          ber of profiles through software programming  
22          changes.

23          (5) ELIGIBLE ENTITY.—The term “eligible enti-  
24          ty” means an entity that submits a bid for a grant  
25          under section 2.

1           (6) MISSION-CRITICAL.—The term “mission-  
2       critical”, used with respect to communications be-  
3       tween 2 or more public safety personnel, means that,  
4       in order for such personnel to protect life or prop-  
5       erty or the safety of such personnel, such commu-  
6       nications must be delivered in a real-time manner  
7       and with sufficient quality and clarity for easy com-  
8       prehension by such personnel, regardless of the con-  
9       ditions under which the communications are sent or  
10      received.

11          (7) PUBLIC SAFETY PERSONNEL.—The term  
12      “public safety personnel” means any Federal, State,  
13      or local law enforcement officer, firefighter, or pro-  
14      vider of emergency medical services or communica-  
15      tions center personnel.

16          (8) RADIO OVER INTERNET PROTOCOL DEVICE  
17      OR ROIP DEVICE.—The term “radio over Internet  
18      protocol device” or “RoIP device” means a device  
19      that is capable of passing audio and other control  
20      functions of a radio system across an Internet pro-  
21      tocol-enabled network utilizing, at a minimum, the  
22      following portions of the electromagnetic spectrum:

23              (A) D Block (the electromagnetic spectrum  
24              between 758 and 763 megahertz, inclusive, and  
25              between 788 and 793 megahertz, inclusive).



1 (B) Public Safety Broadband Network (the  
2 electromagnetic spectrum between 763 and 768  
3 megahertz, inclusive, and between 793 and 798  
4 megahertz, inclusive).

5 **SEC. 5. FUNDING.**

6 (a) PUBLIC SAFETY COMMUNICATIONS DEVICES  
7 FUND.—

8 (1) ESTABLISHMENT.—There is established in  
9 the Treasury of the United States a fund to be  
10 known as the Public Safety Communications Devices  
11 Fund.

12 (2) PURPOSE.—The Assistant Secretary and  
13 the Commission shall use the funds deposited in the  
14 Public Safety Communications Devices Fund to  
15 carry out sections 2 and 3, respectively. Of such  
16 funds, \$1,000,000 in fiscal year 2011 and \$333,000  
17 in each of the fiscal years 2012 through 2014 shall  
18 be available to the Assistant Secretary for adminis-  
19 tration of the grant program established under sec-  
20 tion 2. If the Assistant Secretary does not use the  
21 full amount available for administration in a fiscal  
22 year, the remainder of such amount shall be avail-  
23 able to the Assistant Secretary for administration of  
24 the grant program in any fiscal year prior to fiscal  
25 year 2016.

1 (3) CREDIT.—

2 (A) BORROWING AUTHORITY.—The Assist-  
3 ant Secretary and the Commission may borrow  
4 from the general fund of the Treasury begin-  
5 ning on October 1, 2010, such sums as may be  
6 necessary, but not to exceed a total of  
7 \$70,000,000, to implement sections 2 and 3, re-  
8 spectively.

9 (B) REIMBURSEMENT.—The Secretary of  
10 the Treasury shall reimburse the general fund  
11 of the Treasury, without interest, for any  
12 amounts borrowed under subparagraph (A) as  
13 funds are deposited into the Public Safety Com-  
14 munications Devices Fund, but in no case later  
15 than September 30, 2015.

16 (b) DEPOSITS.—Notwithstanding subparagraphs (A)  
17 and (D) of paragraph (8) of section 309(j) of the Commu-  
18 nications Act of 1934 (47 U.S.C. 309(j)), the Secretary  
19 of the Treasury shall—

20 (1) deposit in the Public Safety Communica-  
21 tions Devices Fund \$70,000,000 of the proceeds (in-  
22 cluding deposits and upfront payments from success-  
23 ful bidders) from the auction of spectrum under  
24 such section during the period beginning on October  
25 1, 2012, and ending on September 30, 2015; and

1           (2) make the funds deposited under paragraph  
2           (1) available to the Assistant Secretary and the  
3           Commission without further appropriation.

4           (c) TRANSFER OF UNUSED FUNDS.—The Secretary  
5           of the Treasury shall transfer to the general fund of the  
6           Treasury any funds remaining in the Public Safety Com-  
7           munications Devices Fund after September 30, 2015.

8           (d) EXTENSION OF AUCTION AUTHORITY.—Section  
9           309(j)(11) of the Communications Act of 1934 (47 U.S.C.  
10          309(j)(11)) is amended by striking “2012” and inserting  
11          “2015”.

