

116<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# H. R. 7310

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IN THE SENATE OF THE UNITED STATES

NOVEMBER 18, 2020

Received; read twice and referred to the Committee on Commerce, Science,  
and Transportation

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## AN ACT

To require the Assistant Secretary of Commerce for Communications and Information to submit to Congress a plan for the modernization of the information technology systems of the National Telecommunications and Information Administration, 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,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Spectrum IT Mod-  
3 ernization Act of 2020”.

4 **SEC. 2. MODERNIZATION EFFORT.**

5 (a) DEFINITIONS.—In this section—

6 (1) the term “Assistant Secretary” means the  
7 Assistant Secretary of Commerce for Communica-  
8 tions and Information;

9 (2) the term “covered agency”—

10 (A) means any Federal entity that the As-  
11 sistant Secretary determines is appropriate; and

12 (B) includes the Department of Defense;

13 (3) the term “Federal entity” has the meaning  
14 given the term in section 113(l) of the National  
15 Telecommunications and Information Administration  
16 Organization Act (47 U.S.C. 923(l));

17 (4) the term “Federal spectrum” means fre-  
18 quencies assigned on a primary basis to a covered  
19 agency;

20 (5) the term “infrastructure” means informa-  
21 tion technology systems and information tech-  
22 nologies, tools, and databases; and

23 (6) the term “NTIA” means the National Tele-  
24 communications and Information Administration.

25 (b) INITIAL INTERAGENCY SPECTRUM INFORMATION  
26 TECHNOLOGY COORDINATION.—Not later than 90 days

1 after the date of enactment of this Act, the Assistant Sec-  
2 retary, in consultation with the Policy and Plans Steering  
3 Group, shall identify a process to establish goals, including  
4 parameters to measure the achievement of those goals, for  
5 the modernization of the infrastructure of covered agen-  
6 cies relating to managing the use of Federal spectrum by  
7 those agencies, which shall include—

8           (1) the standardization of data inputs, modeling  
9           algorithms, modeling and simulation processes, anal-  
10          ysis tools with respect to Federal spectrum, assump-  
11          tions, and any other tool to ensure interoperability  
12          and functionality with respect to that infrastructure;

13          (2) other potential innovative technological ca-  
14          pabilities with respect to that infrastructure, includ-  
15          ing cloud-based databases, artificial intelligence tech-  
16          nologies, automation, and improved modeling and  
17          simulation capabilities;

18          (3) ways to improve the management of covered  
19          agencies' use of Federal spectrum through that in-  
20          frastructure, including by—

21                (A) increasing the efficiency of that infra-  
22                structure;

23                (B) addressing validation of usage with re-  
24                spect to that infrastructure;

1 (C) increasing the accuracy of that infra-  
2 structure;

3 (D) validating models used by that infra-  
4 structure; and

5 (E) monitoring and enforcing requirements  
6 that are imposed on covered agencies with re-  
7 spect to the use of Federal spectrum by covered  
8 agencies;

9 (4) ways to improve the ability of covered agen-  
10 cies to meet mission requirements in congested envi-  
11 ronments with respect to Federal spectrum, includ-  
12 ing as part of automated adjustments to operations  
13 based on changing conditions in those environments;

14 (5) the creation of a time-based automated  
15 mechanism—

16 (A) to share Federal spectrum between  
17 covered agencies to collaboratively and dynami-  
18 cally increase access to Federal spectrum by  
19 those agencies; and

20 (B) that could be scaled across Federal  
21 spectrum; and

22 (6) the collaboration between covered agencies  
23 necessary to ensure the interoperability of Federal  
24 spectrum.

1           (c) SPECTRUM INFORMATION TECHNOLOGY MOD-  
2   ERNIZATION.—

3           (1) IN GENERAL.—Not later than 240 days  
4   after the date of enactment of this Act, the Assist-  
5   ant Secretary shall submit to Congress a report that  
6   contains the plan of the NTIA to modernize and  
7   automate the infrastructure of the NTIA relating to  
8   managing the use of Federal spectrum by covered  
9   agencies so as to more efficiently manage that use.

10          (2) CONTENTS.—The report required under  
11   paragraph (1) shall include—

12           (A) an assessment of the current, as of the  
13   date on which the report is submitted, infra-  
14   structure of the NTIA described in that para-  
15   graph;

16           (B) an acquisition strategy for the modern-  
17   ized infrastructure of the NTIA described in  
18   that paragraph, including how that modernized  
19   infrastructure will enable covered agencies to be  
20   more efficient and effective in the use of Fed-  
21   eral spectrum;

22           (C) a timeline for the implementation of  
23   the modernization efforts described in that  
24   paragraph;

1 (D) plans detailing how the modernized in-  
2 frastructure of the NTIA described in that  
3 paragraph will—

4 (i) enhance the security and reliability  
5 of that infrastructure so that such infra-  
6 structure satisfies the requirements of the  
7 Federal Information Security Management  
8 Act of 2002 (Public Law 107–296; 116  
9 Stat. 2135);

10 (ii) improve data models and analysis  
11 tools to increase the efficiency of the spec-  
12 trum use described in that paragraph;

13 (iii) enhance automation and work-  
14 flows, and reduce the scope and level of  
15 manual effort, in order to—

16 (I) administer the management  
17 of the spectrum use described in that  
18 paragraph; and

19 (II) improve data quality and  
20 processing time; and

21 (iv) improve the timeliness of spec-  
22 trum analyses and requests for informa-  
23 tion, including requests submitted pursu-  
24 ant to section 552 of title 5, United States  
25 Code;

1           (E) an operations and maintenance plan  
2 with respect to the modernized infrastructure of  
3 the NTLA described in that paragraph;

4           (F) a strategy for coordination between the  
5 covered agencies within the Policy and Plans  
6 Steering Group, which shall include—

7           (i) a description of—

8                 (I) those coordination efforts, as  
9 in effect on the date on which the re-  
10 port is submitted; and

11                (II) a plan for coordination of  
12 those efforts after the date on which  
13 the report is submitted, including with  
14 respect to the efforts described in sub-  
15 section (d);

16           (ii) a plan for standardizing—

17                 (I) electromagnetic spectrum  
18 analysis tools;

19                 (II) modeling and simulation  
20 processes and technologies; and

21                 (III) databases to provide tech-  
22 nical interference assessments that  
23 are usable across the Federal Govern-  
24 ment as part of a common spectrum

1 management infrastructure for cov-  
2 ered agencies;

3 (iii) a plan for each covered agency to  
4 implement a modernization plan described  
5 in subsection (d)(1) that is tailored to the  
6 particular timeline of the agency;

7 (G) identification of manually intensive  
8 processes involved in managing Federal spec-  
9 trum and proposed enhancements to those proc-  
10 esses;

11 (H) metrics to evaluate the success of the  
12 modernization efforts described in that para-  
13 graph and any similar future efforts; and

14 (I) an estimate of the cost of the mod-  
15 ernization efforts described in that paragraph  
16 and any future maintenance with respect to the  
17 modernized infrastructure of the NTIA de-  
18 scribed in that paragraph, including the cost of  
19 any personnel and equipment relating to that  
20 maintenance.

21 (d) INTERAGENCY INPUTS.—

22 (1) IN GENERAL.—Not later than 1 year after  
23 the date of enactment of this Act, the head of each  
24 covered agency shall submit to the Assistant Sec-  
25 retary and the Policy and Plans Steering Group a



1 report that describes the plan of the agency to mod-  
2 ernize the infrastructure of the agency with respect  
3 to the use of Federal spectrum by the agency so that  
4 such modernized infrastructure of the agency is  
5 interoperable with the modernized infrastructure of  
6 the NTIA, as described in subsection (c).

7 (2) CONTENTS.—Each report submitted by the  
8 head of a covered agency under paragraph (1)  
9 shall—

10 (A) include—

11 (i) an assessment of the current, as of  
12 the date on which the report is submitted,  
13 management capabilities of the agency  
14 with respect to the use of frequencies that  
15 are assigned to the agency, which shall in-  
16 clude a description of any challenges faced  
17 by the agency with respect to that manage-  
18 ment;

19 (ii) a timeline for completion of the  
20 modernization efforts described in that  
21 paragraph;

22 (iii) a description of potential innova-  
23 tive technological capabilities for the man-  
24 agement of frequencies that are assigned

1 to the agency, as determined under sub-  
2 section (b);

3 (iv) identification of agency-specific  
4 requirements or constraints relating to the  
5 infrastructure of the agency;

6 (v) identification of any existing, as of  
7 the date on which the report is submitted,  
8 systems of the agency that are duplicative  
9 of the modernized infrastructure of the  
10 NTIA, as proposed under subsection (c);  
11 and

12 (vi) with respect to the report sub-  
13 mitted by the Secretary of Defense—

14 (I) a strategy for the integration  
15 of systems or the flow of data among  
16 the Armed Forces, the military de-  
17 partments, the Defense Agencies and  
18 Department of Defense Field Activi-  
19 ties, and other components of the De-  
20 partment of Defense;

21 (II) a plan for the implementa-  
22 tion of solutions to the use of Federal  
23 spectrum by the Department of De-  
24 fense involving information at multiple  
25 levels of classification; and

1 (III) a strategy for addressing,  
2 within the modernized infrastructure  
3 of the Department of Defense de-  
4 scribed in that paragraph, the ex-  
5 change of information between the  
6 Department of Defense and the NTIA  
7 in order to accomplish required proc-  
8 essing of all Department of Defense  
9 domestic spectrum coordination and  
10 management activities; and

11 (B) be submitted in an unclassified format,  
12 with a classified annex, as appropriate.

13 (3) NOTIFICATION OF CONGRESS.—Upon sub-  
14 mission of the report required under paragraph (1),  
15 the head of each covered agency shall notify Con-  
16 gress that the head of the covered agency has sub-  
17 mitted the report.

18 (e) GAO OVERSIGHT.—The Comptroller General of  
19 the United States shall—

20 (1) not later than 90 days after the date of en-  
21 actment of this Act, conduct a review of the infra-  
22 structure of covered agencies, as that infrastructure  
23 exists on the date of enactment of this Act;

24 (2) after all of the reports required under sub-  
25 section (d) have been submitted, conduct oversight

1 of the implementation of the modernization plans  
2 submitted by the NTLA and covered agencies under  
3 subsections (c) and (d), respectively;

4 (3) not later than 1 year after the date on  
5 which the Comptroller General begins conducting  
6 oversight under paragraph (2), and annually there-  
7 after, submit a report regarding that oversight to—

8 (A) with respect to the implementation of  
9 the modernization plan of the Department of  
10 Defense, the Committee on Armed Services of  
11 the Senate and the Committee on Armed Serv-  
12 ices of the House of Representatives; and

13 (B) with respect to the implementation of  
14 the modernization plans of all covered agencies,  
15 including the Department of Defense, the Com-  
16 mittee on Commerce, Science, and Transpor-  
17 tation of the Senate and the Committee on En-  
18 ergy and Commerce of the House of Represent-  
19 atives; and

20 (4) provide regular briefings to—

21 (A) with respect to the application of this  
22 section to the Department of Defense, the Com-  
23 mittee on Armed Services of the Senate and the  
24 Committee on Armed Services of the House of  
25 Representatives; and

1 (B) with respect to the application of this  
2 section to all covered agencies, including the  
3 Department of Defense, the Committee on  
4 Commerce, Science, and Transportation of the  
5 Senate and the Committee on Energy and Com-  
6 merce of the House of Representatives.

Passed the House of Representatives November 17,  
2020.

Attest: CHERYL L. JOHNSON,  
*Clerk.*