

Union Calendar No. 490

116TH CONGRESS
2^D SESSION

H. R. 7310

[Report No. 116-592, Part I]

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.

IN THE HOUSE OF REPRESENTATIVES

JUNE 24, 2020

Mr. MICHAEL F. DOYLE of Pennsylvania (for himself, Mr. LATTA, Mr. LARSEN of Washington, and Mr. WALBERG) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committee on Armed Services, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

NOVEMBER 17, 2020

Reported from the Committee on Energy and Commerce

NOVEMBER 17, 2020

Committee on Armed Services discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed

A BILL

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,*

3 **SECTION 1. SHORT TITLE.**

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

6 **SEC. 2. MODERNIZATION EFFORT.**

7 (a) DEFINITIONS.—In this section—

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

11 (2) the term “covered agency”—

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

14 (B) includes the Department of Defense;

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

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

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

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

3 (b) INITIAL INTERAGENCY SPECTRUM INFORMATION
4 TECHNOLOGY COORDINATION.—Not later than 90 days
5 after the date of enactment of this Act, the Assistant Sec-
6 retary, in consultation with the Policy and Plans Steering
7 Group, shall identify a process to establish goals, including
8 parameters to measure the achievement of those goals, for
9 the modernization of the infrastructure of covered agen-
10 cies relating to managing the use of Federal spectrum by
11 those agencies, which shall include—

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

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

22 (3) ways to improve the management of covered
23 agencies’ use of Federal spectrum through that in-
24 frastructure, including by—

1 (A) increasing the efficiency of that infra-
2 structure;

3 (B) addressing validation of usage with re-
4 spect to that infrastructure;

5 (C) increasing the accuracy of that infra-
6 structure;

7 (D) validating models used by that infra-
8 structure; and

9 (E) monitoring and enforcing requirements
10 that are imposed on covered agencies with re-
11 spect to the use of Federal spectrum by covered
12 agencies;

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

18 (5) the creation of a time-based automated
19 mechanism—

20 (A) to share Federal spectrum between
21 covered agencies to collaboratively and dynami-
22 cally increase access to Federal spectrum by
23 those agencies; and

24 (B) that could be scaled across Federal
25 spectrum; and

1 (6) the collaboration between covered agencies
2 necessary to ensure the interoperability of Federal
3 spectrum.

4 (c) SPECTRUM INFORMATION TECHNOLOGY MOD-
5 ERNIZATION.—

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

13 (2) CONTENTS.—The report required under
14 paragraph (1) shall include—

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

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

1 (C) a timeline for the implementation of
2 the modernization efforts described in that
3 paragraph;

4 (D) plans detailing how the modernized in-
5 frastructure of the NTIA described in that
6 paragraph will—

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

13 (ii) improve data models and analysis
14 tools to increase the efficiency of the spec-
15 trum use described in that paragraph;

16 (iii) enhance automation and work-
17 flows, and reduce the scope and level of
18 manual effort, in order to—

19 (I) administer the management
20 of the spectrum use described in that
21 paragraph; and

22 (II) improve data quality and
23 processing time; and

24 (iv) improve the timeliness of spec-
25 trum analyses and requests for informa-

1 tion, including requests submitted pursu-
2 ant to section 552 of title 5, United States
3 Code;

4 (E) an operations and maintenance plan
5 with respect to the modernized infrastructure of
6 the NTIA described in that paragraph;

7 (F) a strategy for coordination between the
8 covered agencies within the Policy and Plans
9 Steering Group, which shall include—

10 (i) a description of—

11 (I) those coordination efforts, as
12 in effect on the date on which the re-
13 port is submitted; and

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

19 (ii) a plan for standardizing—

20 (I) electromagnetic spectrum
21 analysis tools;

22 (II) modeling and simulation
23 processes and technologies; and

24 (III) databases to provide tech-
25 nical interference assessments that

1 are usable across the Federal Govern-
2 ment as part of a common spectrum
3 management infrastructure for cov-
4 ered agencies;

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

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

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

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

23 (d) INTERAGENCY INPUTS.—

24 (1) IN GENERAL.—Not later than 1 year after
25 the date of enactment of this Act, the head of each

1 covered agency shall submit to the Assistant Sec-
2 retary and the Policy and Plans Steering Group a
3 report that describes the plan of the agency to mod-
4 ernize the infrastructure of the agency with respect
5 to the use of Federal spectrum by the agency so that
6 such modernized infrastructure of the agency is
7 interoperable with the modernized infrastructure of
8 the NTIA, as described in subsection (c).

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

12 (A) include—

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

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

24 (iii) a description of potential innova-
25 tive technological capabilities for the man-

1 agement of frequencies that are assigned
2 to the agency, as determined under sub-
3 section (b);

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

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

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

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

22 (II) a plan for the implementa-
23 tion of solutions to the use of Federal
24 spectrum by the Department of De-

1 fense involving information at multiple
2 levels of classification; and

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

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

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

20 (e) GAO OVERSIGHT.—The Comptroller General of
21 the United States shall—

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

1 (2) after all of the reports required under sub-
2 section (d) have been submitted, conduct oversight
3 of the implementation of the modernization plans
4 submitted by the NTIA and covered agencies under
5 subsections (c) and (d), respectively;

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

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

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

22 (4) provide regular briefings to—

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

1 Committee on Armed Services of the House of
2 Representatives; and

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

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