

1 (e) ROCKET PROPULSION SYSTEM DEFINED.—In
2 this section, the term “rocket propulsion system” means,
3 with respect to the development authorized by subsection
4 (a)(1), a main booster, first-stage rocket engine (including
5 such an engine using kerosene or methane-based or other
6 propellant) or motor. The term does not include a launch
7 vehicle, an upper stage, a strap-on motor, or related infra-
8 structure.

9 **SEC. 1606. DEMONSTRATION OF BACKUP AND COMPLEMEN-**
10 **TARY POSITIONING, NAVIGATION, AND TIM-**
11 **ING CAPABILITIES OF GLOBAL POSITIONING**
12 **SYSTEM.**

13 (a) PLAN.—During fiscal year 2018, the Secretary
14 of Defense, the Secretary of Transportation, and the Sec-
15 retary of Homeland Security (referred to in this section
16 as the “Secretaries”) shall jointly develop a plan for car-
17 rying out a backup GPS capability demonstration. The
18 plan shall—

19 (1) be based on the results of the study con-
20 ducted under section 1618 of the National Defense
21 Authorization Act for Fiscal Year 2017 (Public Law
22 114–328; 130 Stat. 2595); and

23 (2) include the activities that the Secretaries
24 determine necessary to carry out such demonstra-
25 tion.

1 (b) BRIEFING.—Not later than 120 days after the
2 date of the enactment of this Act, the Secretaries shall
3 provide to the appropriate congressional committees a
4 briefing on the plan developed under subsection (a). The
5 briefing shall include—

6 (1) identification of the sectors that would be
7 expected to participate in the backup GPS capability
8 demonstration described in the plan;

9 (2) an estimate of the costs of implementing the
10 demonstration in each sector identified in paragraph
11 (1); and

12 (3) an explanation of the extent to which the
13 demonstration may be carried out with the funds ap-
14 propriated for such purpose.

15 (c) IMPLEMENTATION.—

16 (1) IN GENERAL.—Subject to the availability of
17 appropriations and beginning not earlier than the
18 day after the date on which the briefing is provided
19 under subsection (b), the Secretaries shall jointly
20 initiate the backup GPS capability demonstration to
21 the extent described under subsection (b)(3).

22 (2) TERMINATION.—The authority to carry out
23 the backup GPS capability demonstration under
24 paragraph (1) shall terminate on the date that is 18
25 months after the date of the enactment of this Act.

1 (d) REPORT.—Not later than 18 months after the
2 date of the enactment of this Act, the Secretaries shall
3 submit to the appropriate congressional committees a re-
4 port on the backup GPS capability demonstration carried
5 out under subsection (c) that includes—

6 (1) a description of the opportunities and chal-
7 lenges learned from such demonstration; and

8 (2) a description of the next actions the Secre-
9 taries determine appropriate to backup and com-
10 plement the positioning, navigation, and timing ca-
11 pabilities of the Global Positioning System for na-
12 tional security and critical infrastructure, including,
13 at a minimum, the timeline and funding required to
14 issue a request for proposals for such capabilities.

15 (e) NSPD–39.—

16 (1) JOINT FUNDING.—The costs to carry out
17 this section shall be consistent with the responsibil-
18 ities established in National Security Presidential
19 Directive 39 titled “U.S. Space-Based Positioning,
20 Navigation, and Timing Policy”.

21 (2) CONSTRUCTION.—Nothing in this section
22 may be construed to modify the roles or responsibil-
23 ities established in such National Security Presi-
24 dential Directive 39.

1 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
2 authorized to be appropriated to carry out this section for
3 fiscal year 2018 not more than \$10,000,000 for the De-
4 partment of Defense, as specified in the funding tables
5 in division D.

6 (g) DEFINITIONS.—In this section:

7 (1) The term “appropriate congressional com-
8 mittees” means—

9 (A) the congressional defense committees;

10 (B) the Committee on Science, Space, and
11 Technology, the Committee on Transportation
12 and Infrastructure, and the Committee on
13 Homeland Security of the House of Representa-
14 tives; and

15 (C) the Committee on Commerce, Science,
16 and Transportation and the Committee on
17 Homeland Security and Governmental Affairs
18 of the Senate.

19 (2) The term “backup GPS capability dem-
20 onstration” means a proof-of-concept demonstration
21 of capabilities to backup and complement the posi-
22 tioning, navigation, and timing capabilities of the
23 Global Positioning System for national security and
24 critical infrastructure.

1 **SEC. 1607. ENHANCEMENT OF POSITIONING, NAVIGATION,**
2 **AND TIMING CAPACITY.**

3 (a) PLAN.—The Secretary of Defense, acting through
4 the Council on Oversight of the Department of Defense
5 Positioning, Navigation, and Timing Enterprise estab-
6 lished by section 2279b of title 10, United States Code,
7 shall develop a plan to increase the positioning, navigation,
8 and timing capacity of the Department of Defense to pro-
9 vide resilience to the positioning, navigation, and timing
10 capabilities of the Department. Such plan shall—

11 (1) ensure that military Global Positioning Sys-
12 tem user equipment terminals have the capability,
13 including with appropriate mitigation efforts, to re-
14 ceive trusted signals from the Galileo satellites of the
15 European Union and the QZSS satellites of Japan,
16 beginning with increment 2 of the acquisition of
17 such terminals;

18 (2) evaluate the risks and benefits with respect
19 to ensuring the capability described in paragraph
20 (1);

21 (3) include an assessment of the feasibility,
22 benefits, and risks of military Global Positioning
23 System user equipment terminals having the capa-
24 bility to receive non-allied positioning, navigation,
25 and timing signals, beginning with increment 2 of
26 the acquisition of such terminals;

1 (4) include an assessment of options to use
2 hosted payloads to provide redundancy for the Glob-
3 al Positioning System signal;

4 (5) ensure that the Secretary, with the concur-
5 rence of the Secretary of State, engages with rel-
6 evant allies of the United States to—

7 (A) enable military Global Positioning Sys-
8 tem user equipment terminals to receive the po-
9 sitioning, navigation, and timing signals of such
10 allies; and

11 (B) negotiate other potential agreements
12 relating to the enhancement of positioning,
13 navigation, and timing;

14 (6) include any other options the Secretary of
15 Defense determines appropriate and a determination
16 by the Secretary regarding whether the plan should
17 be implemented; and

18 (7) include an evaluation by the Director of Na-
19 tional Intelligence of the benefits and risks of using
20 non-allied positioning, navigation, and timing sig-
21 nals.

22 (b) SUBMISSION.—Not later than 120 days after the
23 date of the enactment of this Act, the Secretary shall—

24 (1) submit to the congressional defense commit-
25 tees, the Committee on Foreign Affairs of the House

1 of Representatives, and the Committee on Foreign
2 Relations of the Senate the plan under subsection
3 (a); and

4 (2) submit to the Permanent Select Committee
5 on Intelligence of the House of Representatives and
6 the Select Committee on Intelligence of the Senate
7 the evaluation described in paragraph (6) of such
8 subsection.

9 **SEC. 1608. COMMERCIAL SATELLITE COMMUNICATIONS**
10 **PATHFINDER PROGRAM.**

11 (a) REPORT.—Not later than March 1, 2018, the
12 Secretary of the Air Force shall submit to the Committees
13 on Armed Services of the Senate and the House of Rep-
14 resentatives a report that includes the views and plans of
15 the Secretary with respect to using the transaction author-
16 ity provided by section 2371 of title 10, United States
17 Code, to acquire from commercial providers a portion of
18 the satellite bandwidth, ground services, and advanced
19 services for the pathfinder program.

20 (b) DEFINITION.—In this section, the term “path-
21 finder program” means the commercial satellite commu-
22 nications programs of the Air Force designed to dem-
23 onstrate the feasibility of new, alternative acquisition and
24 procurement models for commercial satellite communica-
25 tions.