

## **Section-by-Section Analysis**

### **“Authorization and Supervision of Novel Private Sector Space Activities Act”**

#### **TITLE I – DEPARTMENT OF TRANSPORTATION AUTHORITIES**

##### **Section 101. COMMERCIAL HUMAN SPACE FLIGHT ACTIVITIES.**

The Department of Transportation (DOT) regulates commercial launches and reentries conducted in the United States (U.S.) and by U.S. entities abroad. It does so consistent with public health and safety, the safety of property, and the national security and foreign policy interests of the U.S.

To better ensure safety for human space flight throughout a mission’s entire lifecycle, including in space operations, Subtitle V (Chapter 509) of title 51, United States Code (51 U.S.C.), should be modified to provide DOT with authority to license the operations of a human space flight vehicle in outer space. Authority of this kind would provide a clearer and straightforward path for DOT to authorize and oversee the safety of crew, space flight participants, and government astronauts continuously from the time they are exposed to vehicle hazards prior to flight until after landing when they are no longer exposed to vehicle hazards. This would ensure consistent regulations for human space flight activities throughout its full lifecycle, thus ensuring public safety and occupant safety between launch and reentry.

Specifically, this proposal would amend 51 U.S.C. 50902 to define a “human space flight vehicle” as a vehicle, including a launch vehicle or reentry vehicle, habitat, or other object, built to operate in suborbital trajectory or outer space, including on a celestial body, with a human being on board. A license would then be required for a citizen of the United States to operate a human space flight vehicle in outer space. (51 U.S.C. 50904).

DOT would authorize the operation of a human space flight vehicle consistent with public health and safety, safety of property, space sustainability, international obligations of the United States, and national security, foreign policy, and other national interests of the United States. (51 U.S.C. 50905). This proposal adds “space sustainability” and “other national interests” to DOT’s current authority. Including “space sustainability” would allow DOT to include debris mitigation and require measures to protect the sustainable use of outer space in their regulations, to include the mitigation and remediation of orbital debris and consideration of impacts to the space operational environment.

Including “other national interests” would allow DOT to ensure U.S. interests other than national security and foreign policy interests are addressed in licensing, particularly those associated with the U.S. civil space program (those of the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration, and the United States Geological Survey). This would include planetary protection and the protection of lunar heritage sites, scientific satellites, and the de-confliction with NASA’s Artemis program. The addition of space sustainability and other national interests would also apply to launch and reentry licenses

not involving the operation of a human space flight vehicle, licenses for the operation of launch and reentry sites, and experimental permits.

This proposal would amend 51 U.S.C. 50907 to allow DOT to monitor facilities a licensee uses to produce, assemble, or operate a human space flight vehicle. This proposal would also make conforming amendments to Chapter 509, including sections 50901, 50903, 50908, 50909, 50912, 50917, and 50919 to include other aspects of licensing such as modifications, suspensions and revocations, and enforcement.

## **Section 102. IN-SPACE TRANSPORTATION LICENSE**

The economic vitality of the U.S. space industry is best served with a clear, predictable, and flexible oversight process that promotes access to space and imposes minimal burdens on the industry. The Administration supports a consistent and tailored authorization process for transportation missions in space, with only such conditions as are necessary for the authorization to be consistent with public health and safety, safety of property, space sustainability, international obligations, national security, foreign policy, and other national interests of the United States.<sup>1</sup> By providing a clear path for authorization and supervision of transportation missions in space, the legislation would encourage investment in those activities and foster and promote a robust domestic commercial transportation space industry.

The In-Space Transportation License proposal is modeled, in part, on DOT's existing payload review process, in that DOT would coordinate an interagency consultation process in which designated agencies would review a proposed non-human space flight in-space transportation operation. Pursuant to this interagency consultation, DOT would apply conditions as necessary to protect the public health and safety, safety of property, space sustainability, international obligations of the United States, and national security, foreign policy and other national interests of the United States. [For example, the Department of State would be responsible for identifying and notifying the Secretary of a foreign policy interest or international obligation relevant to a proposed in-space transportation operation, such as an obligation under the Outer Space Treaty, and would recommend authorization conditions as necessary to ensure conformity with the provisions of this treaty.] However, unlike the existing payload review process, the proposed in-space transportation license would allow DOT to provide monitoring of the in-space transportation operation, for example, through site visits. DOT would also issue regulations to address, at a minimum, known safety and sustainability issues and mitigations associated with in-space transportation.

Specifically, this proposal would amend 51 U.S.C. chapter 50904 to require a citizen of the United States to obtain an in-space transportation license to operate a space transportation vehicle if the operation is for the sole purpose of conducting in-space transportation. To operate a space transportation vehicle would mean to have ultimate control over the space transportation vehicle.<sup>2</sup> A non-U.S. citizen would not be eligible for an in-space transportation license.

A space transportation vehicle would be a vehicle operated to conduct in-space transportation, and in-space transportation would be the conveyance of cargo or goods in outer space, including to or from celestial bodies, other than launch or reentry. In-space transportation would not

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<sup>1</sup> As discussed under the Human Space Flight proposal, this proposal adds "space sustainability" and "other national interests" to DOT's current authority. Including "space sustainability" would allow DOT to include debris mitigation and collision avoidance measures to protect the space environment, particularly in low Earth orbit. Including "other national interests" would allow DOT to ensure other U.S. interests other than national security and foreign policy interests are addressed in licensing, particularly those associated with the U.S. civil space program (those of the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, and the United States Geological Survey).

<sup>2</sup> If there are multiple entities involved, the entity with the ultimate ability to decide how the space transportation vehicle should function and to execute that decision, directly or through a legal arrangement with a third party such as a ground station or platform owner, would be considered to be operating that space transportation vehicle.

include the repositioning of active satellites in orbit. (51 U.S.C. 50902). Note also that one or more relatively trivial non-transportation activities added to an in-space transportation mission would not change the requirement to obtain an in-space transportation license from DOT. Under the proposal, the Secretary of Transportation and the Secretary of Commerce would jointly develop guidance on what is considered an operation that is for the “sole purpose” of conducting in-space transportation. (51 U.S.C. 50904).

In-space transportation would include the transport of objects from a launch vehicle to each object’s operational orbit by an orbital transfer vehicle - this is often considered the ‘last-mile’ delivery of objects to specific or various orbital destinations. Another in-space transportation activity is a ‘launch-in-depth’ strategy that includes a traditional space launch followed by an orbital refueling and relaunch of the same vehicle. It also includes the in-space transport of cargo to and from a space station, the in-space delivery of fuel to a fuel depot, and the transport of goods to and from the lunar surface or other celestial body. In-space transportation excludes self-generated movement of an active space object assisted with orbital station keeping or the relocation of active space objects through self-generated methods. The proposal allows for in-space transportation operators to apply for a single license to conduct all transportation activities including launch, in-space transportation, and reentry, which reduces the regulatory burden on applicants and ensures consistency in transportation rules from launch through reentry, if applicable.

The proposal would create a new section, 51 U.S.C. 50924, titled “In-Space Transportation License.” As proposed in section 50924(a), the Secretary of Transportation would review an application for an in-space transportation license and would ensure that the operation is consistent with public health and safety, safety of property, space sustainability, international obligations, national security, foreign policy, and other national interests of the United States. Under proposed section 50924(b), the Secretary would make a determination on an application within 120 days after accepting an application and would inform the applicant of any pending issue and action required to resolve the issue if a decision has not been rendered later than 90 days after the Secretary accepts an application.

As part of an in-space transportation license in accordance with proposed section 50924(c), the Secretary would prescribe any term necessary to ensure compliance with Chapter 509 and any additional requirement necessary to protect the public health and safety, safety of property, space sustainability, international obligations, national security, foreign policy, and other national interests of the United States. The proposal also allows for continuous supervision, to include allowing the Secretary to monitor a site supporting the operation of a space transportation vehicle and to require a licensee to provide updated information, both on a periodic basis and whenever a licensee experiences a material change to operations.

Unlike a launch or reentry license, an in-space transportation license would not be required by statute to include comprehensive financial responsibility requirements. However, proposed section 50924(c) would allow the Secretary to require a licensee to obtain and maintain insurance or a showing of financial responsibility sufficient to cover potential liability for the United States Government, including the Outer Space Treaty and Liability Convention, if the Secretary determines it to be necessary or appropriate.

The proposal would modify 51 U.S.C. 50918 to add a specific consultation role for the Secretary of Commerce, the Chairperson of the Federal Communications Commission, the Administrator of the National Aeronautics and Space Administration, and the Director of National Intelligence. Although DOT consults with these Departments and Agencies on a regular basis, only the Department of Defense and the Department of State are identified in current law. Lastly, the proposal would also make conforming amendments to Chapter 509 to include other aspects of authorizations such as suspensions and revocations, and enforcement.

This proposal would amend 51 U.S.C. 50907 to allow DOT to monitor facilities a licensee uses to operate a space transportation vehicle. This proposal would also make conforming amendments to Chapter 509, including sections 50901, 50903, 50909, 50912, 50914, 50915, 50917, and 50919 to include other aspects of licensing such as modifications, suspensions and revocations, and enforcement.

In addition to providing a regularized, predictable mechanism for authorizing in-space transportation operations, the In-Space Transportation License proposal would preserve the competitiveness of the U.S. space industry by applying to U.S. citizens irrespective of the launch provider. This would also enhance the oversight of U.S. transportation operations in space.

The proposed In-Space Transportation License framework is not intended to affect existing statutory authorities pertaining to space activities such as launch services, communications, or remote sensing currently regulated by the FAA, Federal Communications Commission, or National Oceanic and Atmospheric Administration, respectively.

**TITLE II – DEPARTMENT OF COMMERCE AUTHORITIES**  
**Subtitle A**

**Section 201. SHORT TITLE.**

This section provides the subtitle’s short title.

**Section 202. DEFINITIONS.**

This section adds new definitions to section 60101 of title 51, United States Code, for the following terms: “conduct,” as in conducting an uninhabited space mission; “space sustainability;” “uninhabited space mission;” and “United States Citizen.”

The proposed definition of “uninhabited space mission” means activities conducted in outer space or on celestial bodies, including all supporting activities, without humans on board during any portion of the mission in outer space or on celestial bodies. This definition excludes missions that solely conduct remote sensing activities required to be licensed by the Department of Commerce; activities licensed by the Secretary of Transportation pursuant to chapter 509 of this title; and missions that solely conduct communications activities with the use of radiofrequency and are therefore required to be licensed by the Federal Communications Commission.

**Section 203. LICENSING AUTHORITY FOR UNINHABITED SPACE MISSIONS.**

This section authorizes the Secretary of Commerce to license United States citizens to conduct uninhabited space missions, in consultation with other appropriate U.S. Government agencies. It provides the Secretary 120 days after receiving a complete application to grant a license, provided that the Secretary determines both that the applicant will comply with license conditions and that the mission is consistent with public health and safety, space sustainability, national security, international obligations, foreign policy interests, and other national interests of the United States.

This section further authorizes the Secretary to waive a requirement, including the requirement to obtain a license, if the Secretary finds that the waiver is in the public interest and will not jeopardize the above-listed considerations. The Secretary may revoke a waiver if the waiver is no longer in the public interest or it would jeopardize any of the above-listed considerations.

**Section 204. CONDITIONS FOR UNINHABITED SPACE MISSIONS.**

Section 4 adds a new section 60128 to title 51 of the U.S. Code.

Section 60128(a) prohibits any person that is subject to the jurisdiction or control of the United States to conduct, directly or through a subsidiary or affiliate, an uninhabited space mission without a license or waiver under this Act.

Section 60128(b) requires the Secretary to include conditions in these licenses when the Secretary determines it to be necessary or appropriate to ensure that the mission is consistent with the interests listed in section 3. This section provides a nonexclusive list of conditions that the Secretary may impose, including a condition requiring the licensee to obtain and maintain

insurance coverage; a condition requiring the licensee to participate in the Act's space situational awareness capability; conditions requiring the licensee to implement the Office of Space Commerce's operational recommendations or space coordination policies and procedures; and a condition requiring the licensee to provide accurate, updated information periodically and before the licensee makes a material change to licensed operations.

Section 60128(c) specifies that the Secretary shall consult with specified heads of federal departments and agencies concerning matters within those departments' and agencies' areas of expertise or statutory scope when determining the necessary or appropriate conditions for licenses, as well as when determining whether to approve requests to modify conditions or other license components.

#### **Section 205. NONAPPLICATION.**

This section clarifies that nothing in Subchapter III of chapter 601 of title 51 of the U.S. Code, including language added by this Act, affects or alters the authorities of the Federal Communications Commission or the Department of Transportation. It also specifies that the Secretary shall endeavor to issue only one Department of Commerce license for an uninhabited space mission that involves private remote sensing activities.

#### **Section 206. ADMINISTRATIVE AUTHORITY OF THE SECRETARY.**

This section modifies the existing administrative authority of the Secretary for space-based remote sensing licensing and applies these modified administrative authorities to uninhabited space mission licensing. These modifications include:

- Authorizing the Secretary to modify, suspend, or revoke licenses if the Secretary makes certain determinations or if an unpaid civil penalty is overdue; however, no such sanction may be imposed unless there has been a prior opportunity for a hearing; this is a change from the existing provision, which requires the Secretary to seek a federal court order to terminate, modify, or suspend licenses;
- Increasing the daily civil penalty cap to \$100,000 (from \$10,000);
- Detailing the District Court's jurisdiction in the case of contempt or refusal to obey the Secretary's subpoena;
- Specifying factors the Secretary should consider before assessing penalties;
- Specifying certain processes for adjudicating civil penalties; and
- Authorizing the Secretary to inspect any facility anywhere on Earth, in outer space, or on celestial bodies that is part of or supports licensed operations, subject to consultation with the Secretary of State in the case of facilities not subject to the jurisdiction or control of the United States that are located on celestial bodies.

**Section 207. REGULATORY AUTHORITY.**

This section authorizes the Secretary to issue regulations to carry out Subchapter III of chapter 601 of title 51 of the U.S. Code after public notice and comment in accordance with the Administrative Procedure Act, 5 U.S.C. § 553.

**Section 208. TECHNICAL CORRECTIONS.**

This section makes certain technical corrections and conforming amendments to other sections of title 51.

**Section 209. AUTHORIZATION OF APPROPRIATIONS.**

This section authorizes the appropriation of such sums as may be necessary to support the activities of the Secretary designated by this Act.

**Subtitle B**

**Section 211. DEFINITIONS.**

This section adds new definitions to section 50701 of title 51, for the following terms: “basic space situational awareness services;” “eligible entities;” “office;” “orbital debris;” “Secretary;” “space object;” and “space situational awareness.”

**Section 212. SPACE SITUATIONAL AWARENESS DATA, INFORMATION, AND SERVICES: PROVISION TO NON-UNITED STATES GOVERNMENT ENTITIES.**

This section adds a new section 50704 to title 51 of the U.S. Code, which provides certain authorities to and requirements of the Secretary regarding civil space situational awareness (SSA) data, information, and services.

Section 50704(a) provides that the Secretary, in coordination with appropriate entities within the Department of Commerce and the heads of other relevant agencies:

- (1) shall develop and operate a capability to collect and disseminate basic SSA data, information, and services. This authority complements the Secretary of Defense’s authority in section 2274 of title 10 to provide similar data in furtherance of national security interests.
- (2) shall provide basic SSA services to eligible entities without a user fee but subject to certain terms, including a requirement to provide data to the Secretary for the improvement of the service.
- (3) may provide a subset of basic SSA services to the public for limited purposes.
- (4) may provide additional SSA services free of a user fee, but subject to terms and conditions, if such provision does not significantly compete with the private sector’s services.



(5) may consult with U.S. private entities to determine which government services would compromise the U.S. commercial sector, and provides that such consultations are exempt from the Federal Advisory Committee Act.

Section 50704(b) requires the Secretary to promote the development of advanced SSA services to foster the growth of the U.S. space industry.

Section 50704 (c) authorizes the Secretary to promulgate regulations, policies, and procedures to carry out this section.

Section 50704 (d) (note: currently labeled (c) erroneously) provides immunity for the United States and parties acting for the U.S. Government in the receipt and provision of SSA data, information, or services. The subsection also provides immunity from suit for providers of data, information, or services where the data, information, or services are incorporated into the U.S. Government SSA capability and are provided in good faith.

Section 50704 (e) (note: currently labeled (d)) clarifies that the Secretary is not prohibited from sharing or receiving SSA data, information, or services with U.S. Government entities.

Section 50704 (f) (note: currently labeled (e)) authorizes the Secretary to promulgate standards addressing best practices related to SSA data, information, and services.

### **Section 213. SPACE TRAFFIC COORDINATION.**

Section 213 adds a new section 50705 to title 51 of the U.S. Code.

Section 50705(a) authorizes the Secretary to provide operational recommendations to eligible entities to ensure safety of space operations, compliance with international obligations, foreign policy interests and other national interests.

Section 50705(b) requires the Secretary to support the development of standards, policies, and practices regarding space traffic coordination, in coordination with the Department of State and other agencies as appropriate. It also authorizes the Secretary to engage in international dialogue and collaboration toward implementing a framework for internationally aligned space traffic coordination in coordination with the Secretary of State and in appropriate consultation with the heads of appropriate Federal departments and agencies within their areas of expertise or statutory scope.

Section 50705(c) authorizes the Secretary to promulgate policies and procedures addressing standards and best practices related to space traffic coordination for non-governmental space missions.

Section 50705(d) provides immunity from lawsuits for the United States and individuals and entities acting for the U.S. Government for any cause of action arising from the provision or receipt of operational recommendations for space traffic coordination and related actions and omissions. This subsection also provides for immunity from suit for providers of data, information, or services where such data, information, or services are acquired from entities

other than the U.S. Government are used to support these operational recommendations and are provided in good faith.

**Section 214. PARTNERSHIPS AND AGREEMENTS.**

This section authorizes the Office of Space Commerce to enter into partnerships and agreements in furtherance of this chapter and subchapter III of chapter 601 of this title.