Before the Federal Communications Commission Washington, D.C. 20554

n the Matter of	
Mitigation of Orbital Debris in the New Space Age	IB Docket No. 18-313
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COMMENTS OF THE UNITED STATES DEPARTMENT OF COMMERCE

On behalf of the United States Department of Commerce (the Department), the National Telecommunications and Information Administration (NTIA) submits these comments on the Notice of Proposed Rulemaking in the above captioned proceeding.¹ The Department greatly appreciates the Commission's focus on the important issues of mitigating the risks orbital debris pose to United States space innovation and investment and determining the proper regulatory framework, legal authority, and expertise required for establishing comprehensive federal requirements for space debris.

SUMMARY

The executive branch is prioritizing the further growth of the U.S. space commerce industry. Through a series of Space Policy Directives, President Trump has charged executive branch agencies, and in particular the Secretary of the Department of Commerce (Secretary), to lead development of a regulatory environment to grow U.S. leadership in commercial space innovation, investment, and operation. These Space Policy Directives, and the resulting agency activity, bear

¹ See Mitigation of Orbital Debris in the New Space Age, IB Docket No. 18-313, Notice of Proposed Rulemaking, IB Dkt No. 18-313, FCC18-159 (rel. Nov. 19, 2018) (FCC Orbital Debris NPRM). NTIA serves as the President's principal adviser on telecommunications and information policy and represents the Executive Branch before the Commision. See 47 U.S.C. §902(b)(2)(D), (J).

upon mitigation of orbital debris and, therefore, the Commission's proposals in this proceeding.

The Department appreciates the Commission's recognition of the need for coordinated agency action to address orbital debris mitigation.² That need is rooted in the Commission's "shared . . . role with other agencies in evaluating orbital debris mitigation plans associated with non-Federal space operations."³ In fact, the rules that the Commission would amend are informed by tools, guidelines, and practices developed by the National Aeronautics and Space Administration (NASA).⁴ Further, significant elements of non-federal space operations are subject to regulation by other federal agencies, notably the Department's National Oceanic and Atmospheric Administration (NOAA) and the Federal Aviation Administration (FAA).⁵ Moreover, as the Commission notes, any legal jurisdiction over space operations by the Commission depends on a determination that the Commission's actions serve the public interest.⁶ Such a determination cannot be made without the fulsome incorporation of the President's policies on space commerce and the corresponding expertise, initiatives, and rulemakings of the federal agencies tasked by the President in the Space Policy Directives with carrying out those policies.

The Department, through the Office of Space Commerce (OSC), continues to gather industry insight into how best to promote and, where necessary, regulate commercial space activities in a way that results in responsible investment and operation under U.S. flag. The Secretary has acted with specific focus, as directed by the President, on mitigation of orbital debris. Additionally,

² See *id*. ¶ 14.

 $^{^{3}}$ *Id.* ¶ 16.

⁴ See id. ¶ 10. See also Statement of Commissioner Brendan Carr at 1, IB Dkt. No. 18-313 (existing orbital debris regime was largely "built on NASA standards"), *available at* https://docs.fcc.gov/public/attachments/FCC-18-159A4.pdf.

⁵ See id. ¶ 16.

⁶ See id. ¶ 15.

through NOAA, the Secretary is revising regulations on remote sensing that reflect administration policies.⁷ NASA is also working through interagency efforts to revise U.S. Government Orbital Debris Mitigation Standard Practices at the direction of the President.⁸

These and other agency actions detailed below, which reflect the President's approach to regulation of space to advance responsible, safe U.S. innovation and investment, bear upon and thus should inform any Commission action in this proceeding. Without proper consideration, any Commission action may not only be duplicative,⁹ but could result in the Commission proposing overlapping or inconsistent regulations with those being undertaken by other federal agencies which would create confusion, increase costs, and be wholly at odds with the space commerce policies of the President.

To avoid such an outcome, the Department respectfully requests that the Commission defer action in this proceeding until completion of the agency actions mandated by the President's Space Policy Directives. In the interim, the Department requests the Commission's participation in an Interagency Working Group on Commercial Orbital Debris Requirements to, among other things, identify the proper agency to administer orbital debris regulations, develop regulatory parameters for any such regulations, and identify what approach the administration should take with regard to space insurance to advance U.S. space commerce. The Department looks forward to working with the Commission toward the shared goals of ensuring responsible space operation that will propel U.S. innovation and investment, and encourage commercial space operations under U.S. flag.

⁷ See Space Policy Directive-2 (SPD-2) Section 3, Streamlining Regulations on Commercial Use of Space, 83 Fed. Reg. 24901–02 (May 30, 2018), available at https://www.federalregister.gov/documents/2018/05/30/2018-11769/streamlining-regulations-on-commercial-use-of-space.

⁸ See Space Policy Directive-3 (SPD-3) Section 6(b), National Space Traffic Management Policy, 83 Fed. Reg. 28969, 28973 (Jun. 18, 2018), *available at* https://www.federalregister.gov/documents/2018/06/21/2018-13521/national-space-traffic-management-policy.

⁹ See FCC Orbital Debris NPRM, supra note 1, at ¶ 17.

I. ORBITAL DEBRIS REGULATIONS SHOULD EXECUTE THE ADMINISTRATION'S ESTABLISHED POLICY TO ADVANCE RESPONSIBLE U.S. INVESTMENT, INNOVATION, AND OPERATION IN SPACE.

President Trump, Vice President Pence, and the federal departments and agencies they have assigned to advance safe operation in space under the President's Space Policy Directives are actively developing policies to ensure the United States remains the leader in space commerce and innovation. The administration's prioritization of the U.S. commercial space industry reflects the promise that industry holds to unleash further economic prosperity and innovation in the United States. This prioritization, and the administration's policy to shape U.S. space regulations to speed U.S. space commerce growth, must be reflected in any revisions to orbital debris regulations.

As the Commission makes clear, the global space economy, though difficult to assess, is growing rapidly¹⁰ and the President has recognized that, under the proper regulatory environment, the United States will have a trillion-dollar commercial space economy in a matter of years. The Secretary and other federal departments and agencies are charged with developing specific policies and taking actions to ensure that U.S. innovators and investors rapidly grow the U.S. space economy through responsible operations.

On June 30, 2017, President Trump revived the National Space Council, chaired by Vice President Pence, following a twenty-five-year dormancy. Subsequently, the President signed three Space Policy Directives to accelerate human space exploration and discovery and create new economic opportunities. In signing Space Policy Directive 1 (SPD-1), President Trump reaffirmed that Americans would lead in space once again on all fronts, and that America would "[1]ead an innovative and sustainable program of exploration with commercial and international

¹⁰ See id. at \P 1.

partners to enable human expansion across the solar system and to bring back to Earth new

knowledge and opportunities."11

On February 21, 2018, the National Space Council recommended to the President a specific spectrum-related action:

[NTIA] shall coordinate with the Federal Communications Commission to ensure the protection and stewardship of radio frequency spectrum necessary for commercial space activities, without adversely affecting national security or public safety. The Department of Commerce shall take an active role in working with U.S. industry and members of the National Space Council to develop and advocate, and to the extent possible, implement spectrum management policies that make U.S. space-related industries more competitive globally.¹²

On May 24, 2018, President Trump issued SPD-2, Streamlining Regulations on Commercial Use

of Space.¹³ Section 1 of the Directive furthers the responsibility of the entire federal government

to increase U.S. space industry's global competitiveness through leadership in regulatory

matters:

It is the policy of the executive branch to be prudent and responsible when spending taxpayer funds, and to recognize how government actions, including Federal regulations, affect private resources. It is therefore important that regulations adopted and enforced by the executive branch promote economic growth; minimize uncertainty for taxpayers, investors, and private industry; protect national security, public-safety, and foreign policy interests; and encourage American leadership in space commerce.¹⁴

The President's Space Policy Directives charge the executive branch as a whole to work across departments and agencies to ensure the development of a revised regulatory framework that prioritizes responsible U.S. investment and operation in space. To the extent the Commission determines that the President's Space Policy Directives are best served with new regulations,

¹¹ Space Policy Directive-1, 82 FR 59501 (Dec. 14, 2017).

¹² Record of Decision, National Space Council, NSpC ROD-2018-01 at 5 (Feb. 21, 2018).

¹³ See SPD-2, *supra* note 7, at 24901.

¹⁴ *Id.* at 24901.

they must execute administration policy in the Space Policy Directives and embrace the intent of the President's focus on advancing U.S. space commerce.

II. THE COMMISSION SHOULD UTLIZE DATA GATHERED BY THE DEPARTMENT AND OTHER AGENCIES IN EXECUTING THE EXECUTIVE BRANCH SPACE COMMERCE REGULATORY PRIORITIES.

Since issuance of the President's Space Policy Directives, the Secretary and other executive branch agencies have taken many actions to advance their regulatory intent. Many of these actions inform or otherwise have significant bearing upon the Commission's proposals. Thus, in order for the Commission to embrace the requirements of the Space Policy Directives, it must consider these actions and work across agencies to identify the methods by which orbital debris requirements can be revised to reflect the President's policies on space commerce.

a. The Department is Executing on Spectrum and Orbital Debris Directives Bearing on Commission Proposals.

Pursuant to the President's Space Policy Directives, the Secretary is developing policies that will minimize the threat of orbital debris, engage the space insurance market, develop methods to mitigate conjunction, and address other matters currently before the Commission.

In Section 5 of SPD-2, which focuses on radio frequency spectrum, the Department of Commerce, in coordination with the Office of Science and Technology Policy (OSTP), is to work with the Commission to ensure that Federal Government activities related to radio frequency spectrum are, to the extent permitted by law, consistent with the President's Space Policy Directives. Section 5 of SPD-2 also directs the Secretary and the Director of OSTP to prepare a report "on improving the global competitiveness of the United States space sector through radio frequency spectrum policies, regulation, and United States activities at the International Telecommunication Union and other multilateral forums."¹⁵ This report, released on March 26, 2019, provides significant opportunity for the Department and the Commission to meet the shared goals of streamlining regulations and managing spectrum resources in a way that reflects the national priority of space commerce and the space communications that space commerce growth requires.¹⁶

In the context of orbital debris mitigation, the administration is advancing policies that will enable continued United States leadership in space commerce innovation and investment. The President's Space Policy Directive 3 (SPD-3), the first comprehensive National Space Traffic Management Policy, calls for an interagency assessment to orbital debris threats and mitigation.¹⁷ This Directive requires that the United States develop and incorporate appropriate standards and best practices into Federal law and regulation through appropriate rulemaking or licensing actions, and that such guidelines should encompass protocols for all stages of satellite operation from design through end-of-life.¹⁸ The Department has taken on significant leadership in in developing policies and regulations for future U.S. orbital operations.

The Department has assigned this responsibility to the Office of Space Commerce (OSC), which serves as the principal unit for the coordination of commercial space-related issues, programs, and initiatives to, among other things:

- 1) Foster the conditions for the economic growth and technological advancement of the United States space commerce industry;
- 2) Coordinate space commerce policy issues and actions within the Department;

¹⁵ *See id.*

¹⁶ See U.S. Dep't of Commerce, Recommendations for Improving the Global Competitiveness of the United States Space Sector through Radio Frequency Spectrum Policies, Regulation, and United States Activities at the International Telecommunication Union and Other Multilateral Forums (2019), available at <u>https://www.ntia.doc.gov/files/ntia/publications/drivingspacecommerce.pdf</u>.

¹⁷ See generally SPD-3, supra note 8.

¹⁸ See id.

- Represent the Department of Commerce in the development of United States policies and in negotiations with foreign countries to promote United States space commerce; and
- 4) Promote the advancement of United States geospatial technologies related to space commerce, in cooperation with relevant interagency working groups.¹⁹

To meet this responsibility, the Department must regularly assess existing guidelines for non-government orbital activities and work collaboratively with other federal agencies to develop a responsive regulatory environment for licensing these activities. Accordingly, and directly related to the Commission's proposal, the Department has been charged to establish a more flexible and adaptable policy framework for commercial space situational awareness (SSA) and space traffic management (STM) services that could better address and manage the growing congestion in space and address future needs of U.S. orbital operations that supports U.S. innovation, investment, and operations in space.²⁰

The Department will soon be releasing a Space Situational Awareness and Space Traffic Management Services Request for Information (SSA/STM Services RFI) seeking information on key aspects directly related to mitigating the impact of orbital debris. Pursuant to the duties the President charged the Department with in SPD-3, the Department will be seeking information on:

- specific capabilities commercial entities might currently and in the future provide to enhance the space situational awareness (SSA) data and the space traffic management (STM) services the U.S. government currently provides through an open architecture data repository to the public;
- 2) SSA, STM, and orbital debris mitigation best practices; and
- 3) Perspectives on the appropriate regulatory structures the Department should adopt to drive the development and responsible use of such SSA and STM enhancements in order to protect national interests and further encourage U.S. commercial space investment.

¹⁹ See 51 USC 507(c). Given this statutory mandate, the Department and OSC have direct legal interest in this proceeding and how it might affect the Department's requirements and objectives under law and the President's Space Policy Directives.

²⁰ See SPD-3, supra note 8, at Section (6)(f).

In this inquiry, the Department will seek specific data on several space operational areas the

Commission's NPRM addresses, including data on:

- 1) In the context of enhanced SSA/STM data, what best practices, technical guidelines, minimum safety standards, behavioral norms, and orbital deconfliction protocols should be globally adopted?
- 2) What pre-launch and on-orbit collision avoidance support services exist that will mitigate conjunction, and improve situational awareness, and how should they be incorporated into best practices?
- 3) What existing regulations, across agencies, positively and negatively enhance SSA/STM use and related orbital debris mitigation?
- 4) How do such existing regulations encourage U.S. and allied space commerce investment, and how should they be revised?
- 5) What emerging trends in space missions and proposed commercial spaceflight activity, including spacecraft safety standards, satellite tracking standards, and satellite control standards, impact existing and future SSA and STM policies and regulations. How should these trends drive revision to those policies and regulations?
- 6) How can the proper regulatory environment drive a space activity insurance market that encourages investment?
- 7) What, if anything, should the federal government do to encourage insurance parameters for space activities that will encourage responsible space activities and making the U.S. the flag of choice for leading space innovators?

In addition, the Secretary has convened space investment and insurance summits focused on

many aspects of the U.S. space commerce industry that could inform the Commission's action on this proceeding. On December 12, 2018, the Secretary convened the first Space Investment Summit, which brought together key members of the finance and lending institutions with space industry leaders and introduced investors to the groundbreaking innovations and space services being provided by the commercial space sector. Relevant to the Commission's proceeding, the topics discussed included regulatory environments across federal agencies that could support or inhibit further space commerce investment in the U.S.

Following the Space Investment Summit, the Secretary held an event with industry leaders focusing on "Risks & Opportunities in Space" on March 5, 2019. The two panels convened

were: 1) Protecting Satellites - Insurance Perspectives on Space Activity, featuring insurance industry experts; and 2) Innovative SSA/STM Services - What Insurers Needs to Know, featuring panelists from commercial SSA and STM services industry. These panels discussed issues of key importance to the Commission's proceedings, including: a) the overarching need for and dynamics of the space insurance market; and b) the emerging conjunction mitigation capabilities that that will influence that market and the level of indemnification needed.

In June 2019, the Department, in conjunction with the Department of State, will convene a Space Enterprise Summit to develop a vison for advancing international space commerce and better understand how commercial and international partnerships will develop and define the space economy. A key area of discussion at this summit will be discussions on how to develop a robust commercial space economy through the creation of a permissive, "light-touch" regulatory regime that accommodates rapid innovation and expansion of commercial markets and avoids "dual regulation" by multiple regulating entities. Again, these topics directly relate to the issues raised by the Commission in this proceeding.

The data stakeholders will provide in the Departments' SSA/STM Services RFI and the significant amount of stakeholder input from the Department's summits on space commerce, which the Department will provide in a subsequent filing to the Commission upon the conclusion of its June 2019 Space Enterprise Summit, will have a direct bearing on the Commission's inquiries in this proceeding. The Commission's proposals, including Control of Debris Released During Normal Operations²¹, Minimizing Debris Generated by Release of Persistent Liquids²², and Safe Flight Profiles,²³ among others, will be directly informed by the responses from key

²¹ See FCC Orbital Debris NPRM, supra note 1, at ¶¶18–21.

²² See id. at ¶¶ 22–23.

²³ See id. at ¶ 24–42.

stakeholders to the Department's SSA/STM Services RFI, including questions like those listed above addressing best practices, pre-launch and on-orbit collision avoidance support services, and the impact of current and proposed regulations. Additionally, the Commission's inquiry on Liability Issues and Economic Incentives²⁴ must be driven by industry input that the Department's RFI can provide on the reciprocal nature of government and industry action affecting insurance markets and the need for indemnification levels and coverage.

Based upon these efforts undertaken in response to the President's Space Policy Directives, the Department has begun developing key principles with regard to a U.S. regulatory framework that will further expand our nation's leadership in responsible space activity and investment. The Department believes that all space policies, across federal agencies, must anticipate development of new space activities and be crafted to ensure the U.S. is the flag of choice for commercial space operations. U.S. space regulation must create an incentive for companies to choose to reside in the U.S. and responsibly invest, innovate, and operate in space. Moreover, any regulations for space operators must be easily navigated and consolidated when possible. Additionally, regulations for space operations should be performance-based and allow flexibility to meet baseline standards in order to properly accommodate the rapidly-evolving commercial space industry. By uniting across agencies, executive branch agencies can design and revise federal regulations in a way that drives responsible investment, innovation, and operation in space.

The Department has worked with other executive branch agencies in examining current and future regulations and performance-based reforms and hopes to expand its interagency collaboration to the Commission. The responses to the Department's SSA/STM Services RFI

²⁴ See id. at ¶¶ 68–74.

will have such bearing on the Commission's proposals in its NPRM that the Department seeks to further collaborate with the Commission on space regulation and urges that it not act until the SSA/SST Services RFI responses can become part of the Commission's proceeding record and are duly considered. Moreover, the Department seeks enhanced collaboration as the Commission considers proposals in this proceeding to ensure that the policies set forth in the President's Space Policy Directives on U.S. space commerce are reflected in the Commission's final determinations.

b. NOAA's Regulatory Reform Reflecting the Executive Branch Space Commerce Priorities Should Inform the Commission's Action.

As the Department executes the President's Space Policy Directives, the Secretary has identified methods to advance U.S. space commerce through specific regulatory reform. By law, the Secretary is authorized to issue and enforce licenses for the operation of private remote sensing space systems.²⁵ The Secretary identified an opportunity to revise the Department's rules through examining current Department regulations on remote sensing administered by the NOAA's National Environmental Satellite, Data, and Information Service. In the Department's Advanced Notice of Proposed Rulemaking, the Department has made clear that regulatory reform in the area of space commerce must spur market growth by:

- 1) Encouraging companies to do business in the United States;
- 2) Helping businesses maintain a competitive advantage in the U.S.;
- 3) Facilitating the growth of in the U.S. remote sensing industry, and
- 4) Supporting remote sensing innovation.²⁶

²⁵ See 51 U.S.C. 60121 et seq.

²⁶ See Licensing Private Remote Sensing Space Systems, Advance Notice of Proposed Rulemaking, 83 Fed. Reg. 30592 (Jun. 29, 2018).

After significant input from industry stakeholders in response to the ANPRM on changes that can meet these critical objectives, the Department is currently working with other executive branch agencies to develop reforms that will protect national security and advance U.S. space commerce investment and innovation. As the administration's approach to regulatory reform in the substantive reforms the Department adopts, and the interagency manner in which the executive branch's regulatory perspective on space commerce is adopted, should inform the Commission as it considers next steps in its orbital debris proposals.

c. Final Revisions to the U.S. Government Orbital Debris Mitigation Standard Practices Should Guide the Commission's Proposals.

In proposing revised orbital debris regulations, the Commission utilizes varying international and U.S. guidelines and standards as reference point for new regulations.²⁷ The Department hopes to learn the view of innovators "on the suitability of each referenced guidance as the foundation of a given proposed regulation."²⁸

However, as the Commission duly notes, the President's Space Policy Directive 3 directs the Administrator of NASA, in coordination with the Secretaries of State, Defense, Commerce, and Transportation, and the Director of National Intelligence, and in consultation with the Chairman of the Commission, to lead efforts to update the U.S. Government Orbital Debris Mitigation Standard Practices and establish new guidelines for satellite design and operation.²⁹ The Department, through its Office of Space Commerce, is actively engaged in an interagency collaboration to achieve this goal and appreciates the Commission's ongoing consultation in this effort.

²⁷ See Orbital Debris NPRM, supra note 1, at ¶ 11.

²⁸ Id.

²⁹ See id.

The Department lauds the Commission's decision to consider any updates to the U.S. Government Orbital Debris Mitigation Standard Practices that are finalized.³⁰ The Commission provides the caveat that such consideration will be made if the revisions are final during the life of this proceeding.³¹ In light of the ongoing discussion led by NASA, the Department believes that to execute the President's directive to revise these standards and regulations in a manner advancing space commerce, the Commission must utilize, to the extent feasible, the most recent updates to the U.S. Government Orbital Debris Mitigation Standard Practices once made available. Utilizing different Commission standards rather than the updated U.S. Government Orbital Debris Mitigation Standard Practices once they are adopted, would frustrate the intent of the President's clearly expressed space commerce policies and the goal of the administration to advance regulatory reform.

d. The Federal Aviation Administration's Planned Orbital Debris Reforms Must be Considered by the Commission.

The FAA is currently developing a Notice of Proposed Rule Making on its current orbital debris regulations. In preparing its orbital debris regulatory reform proposals, the FAA has stated it plans to align its regulations with the U.S. Government Orbital Debris Mitigation Standard Practices and U.S. defense operations in its ongoing effort to ensure safety and efficiency of space operations:

Orbital debris poses a growing threat to space operations. Debris mitigation guidelines, standards, and policies must be revised periodically, enforced domestically, and adopted internationally to mitigate the operational impacts of orbital debris. To help accomplish this, FAA, in consultation with appropriate Federal partners would update its existing orbital debris mitigation regulations to more-closely align with the U.S. Government Orbital Debris Mitigation Standard

³⁰ See id. at ¶ 14.

³¹ See id.

Practices, and would update current launch collision avoidance regulations to match U.S. Air Force Space Command (AFSPC) practice.³²

As the Commission examines its orbital debris proposals, the Commission should be informed by the plans of, and approach taken by, the FAA with regard to its regulations on the very same issue. In doing so, the Commission will best position itself to ensure that its regulations correspond to the President's Space Policy Directives, including the policies to avoid duplicative regulation, have as minimal an impact on the industry as possible, and functionally assist in protecting against conjunction.

III. THE COMMSSION SHOULD WORK WITH THE EXECUTIVE BRANCH TO DETERMINE THE BEST APPROACH TO REVISED ORBITAL DEBRIS REGULATIONS.

It is clear that, given the multiple regulatory schemes across executive branch agencies impacting space commerce generally and orbital debris specifically, commercial space policies must be based on the technical expertise of the whole government. To that end, the Department has contributed to interagency efforts to achieve these shared space policy goals by leading administration efforts to advance space commerce and The President's Space Policy Directives are producing results and increasingly support a thriving space commerce industry in the U.S.

As it leads the federal effort to dramatically grow U.S. space commerce, the Department shares the Commission's objective "to ensure continued, safe operations in space and maximize space commerce investments and innovation."³³ Without a collaborative approach across federal agencies and independent authorities this objective cannot be attained. The Department greatly appreciates the Commission's recognition that, unlike in 2004 when the Commission released its

³² February 2019 Significant Rulemakings Report, U.S. DEPARTMENT OF TRANSPORTATION (Feb. 2019), available at https://www.transportation.gov/regulations/february-2019-significant-rulemakings-report.

³³ See FCC Orbital Debris NPRM, supra note 1, at ¶ 2.

earlier orbital debris regulations, "several agencies examine the impact of potential space debris in space operation authorizations."³⁴ Moreover, the Department lauds the Commission's inquiry "on whether there are any areas in which [the Commission's] proposed requirements may overlap with requirements that are clearly within the authority of other agencies, so that we may seek to avoid duplicative activities."³⁵ As noted above, there is regulatory overlap across agencies that the Commission recognized and addressed in its 2004 rules, and the Department appreciates the Commission's inquiry on whether exceptions to applications of its proposed rules may be appropriate.³⁶ The Department suggests that, as it has in the past in questions of overlapping federal authority, the Commission should collaborate with the implicated agencies to agree upon delegation of the appropriate orbital debris regulatory structure to the agency best equipped to address, if necessary, the various proposals the Commission proffers in this proceeding.

Accordingly, the Department will convene in the coming weeks a meeting of the Interagency Working Group on Commercial Orbital Debris Requirements. In fulfilling its requirements under the Space Policy Directives, the Department will seek to leverage the expertise of a host of federal agencies with the goals of:

- 1) Determining the appropriate agency, equipped with the appropriate statutory authority and subject matter expertise, to develop a single, unified set of orbital debris regulations;
- 2) Identify agency consensus on the scope and technical parameters of orbital debris regulations; and
- 3) Develop policies that will drive an approach to space operation insurance reflective of the Executive Branch policies on space commerce.

³⁴ Id.

³⁵ *Id.* at ¶ 17.

³⁶ See id.

The objective of this working group will be a Memorandum of Understanding establishing, with regard to orbital debris regulations, the limits of each agency's statutory authority and where the authority of other agencies ought to be invoked.³⁷ In uniting with other federal agencies to achieve a unified regulatory approach to orbital debris that embraces the President's Space Policy Directives, the Commission and all other implicated agencies can best serve the public interest and advance opportunities for the U.S. space commerce industry.

CONCLUSION

Through the Space Policy Directives, the President seeks to focus the entire U.S. Government around common regulatory values that will advance U.S. space commerce. The U.S. regulatory environment must, to spur investment and innovation, encourage responsible space operations. The Department has taken many steps, which complement those of several other agencies, to develop and support the Executive Branch's policy on space commerce. To realize the objective of effective space regulation that advances U.S. economic growth, the Commission should leverage the policy, information, and regulatory actions other agencies have developed to ensure its proposals reflect the President's Space Policy Directives. Further, the Commission, in advance of a final determination, should engage in an interagency effort to identify

³⁷ The FCC has recently led on this very issue, uniting agencies in an effort to identify the most suitable regulatory venues on issues spanning multiple agencies. In the Restoring Internet Freedom FCC-FTC Memorandum of Understanding, the FCC determined the limits of its statutory authority and where the authority of other agencies ought to commence. In that agreement, the FCC and the FTC agreed to coordinate and cooperate by working together to protect consumers. These organizations now do so by (1) consulting on investigations or enforcement actions that implicate the other agency's jurisdiction, (2) sharing intelligence, legal expertise, techniques and tools, and (3) collaborating on consumer and industry outreach. This agreement delegated authority previously thought to be housed at the FCC to the FTC. *See* Restoring Internet Freedom FCC-FTC Memorandum of Understanding, FCC (Dec. 14, 2017), *available at*

https://www.ftc.gov/system/files/documents/cooperation_agreements/fcc_fcc_mou_internet_freedom_order_1214_f inal_0.pdf.

the best agency to address orbital space debris mitigation and develop a national space insurance policy. The Department is eager to continue its work, alongside the Commission, to this end.

Respectfully submitted,

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