



April 5, 2019

**Attn:** Federal Communications Commission

**Re:** Initial Comments on Mitigation of Orbital Debris in the New Space Age

**IB Docket No. 18-313**

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The Institute for Policy Integrity (“Policy Integrity”) at New York University School of Law<sup>1</sup> respectfully submits the following comments to the Federal Communications Commission regarding possible market-based alternatives to and regulatory analysis of new regulation of orbital debris. Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy.

Policy Integrity briefly touches on two issues in these initial comments, with the further intention to expand on these topics more fully during the reply comment period.

First, the Commission “seeks comments generally on the costs and benefits of insurance as an economic incentive for orbital debris mitigation”; raises the specific ideas of an indemnification requirement for space station licensees and a “bond requirement...with respect to successful completion of end of life disposal”; and “further invites comment generally on what economic approaches might be feasible and effective in creating incentives” to internalize the “negative externality” of orbital debris.<sup>2</sup> In response, Policy Integrity offers initial suggestions on the type of inquiry the Commission might undertake in considering market-based regulatory alternatives.

Second, the Commission asks whether regulation of orbital debris will “result in a net benefit, even if it may give rise to some regulatory costs” and “seeks comments on the benefits and costs of various combinations” of regulatory alternatives.<sup>3</sup> In these initial comments, Policy Integrity calls on the Commission to assess the net benefits of regulatory alternatives after considering the full range of direct and indirect benefits, including from spillover effects, foreign reciprocity, and U.S. interests in foreign operations in space.

## The Commission Should Broadly Consider Market-Based Alternatives

The Commission raises the ideas of indemnification, bonds, or other liability- and insurance-based requirements as alternatives or supplements to other regulatory approaches. Such market-based alternatives could help efficiently internalize the global externalities of orbital debris at the lowest compliance costs, and the Commission should fully explore these ideas. The Commission may be able to learn important lessons from other agencies that have already developed liability-based regulatory approaches, including in the context of environmental regulation. Policy Integrity will plan in our reply comments to propose some useful comparative examples or criteria for assessing the potential advantages and disadvantages of applying a liability-based approach to orbital debris.

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<sup>1</sup> This document does not purport to present New York University School of Law’s views, if any.

<sup>2</sup> 84 Fed. Reg. 4742, 4750-51 (Feb. 19, 2019); *see also id.* at 4751 (“[T]he Commission asks whether there are other economic incentives available that the Commission could offer that would help achieve the public interest in this area.”).

<sup>3</sup> *Id.* at 4751-52.

The Commission should in fact even more broadly consider a full range of market-based regulatory alternatives. In the Commission's *Strategic Plan 2018-2022*, Performance Goal 4.1.2 promises to implement the principles of Executive Order 12,866.<sup>4</sup> Executive Order 12,866 § 1(b)(3) requires agencies to assess a broad range of economic incentives, including marketable permits.<sup>5</sup> The Administrative Conference of the United States recently issued new recommendations to federal agencies on Marketable Permits;<sup>6</sup> Policy Integrity's Legal Director, Jason A. Schwartz, was the consultant to the Administrative Conference on that project and prepared the project's final report.<sup>7</sup> To the extent that the risks of orbital debris are relatively fungible and to the extent that risk reductions are quantifiable and verifiable, the Commission may also consider a variety of marketable permit approaches to the regulation of orbital debris, including potentially the use of offset credits in conjunction with future active debris removal operations. Policy Integrity will explore ideas for market-based approaches to regulation of orbital debris more fully in our reply comments.

## The Commission Should Assess Net Benefits by Fully Weighing Direct and Indirect Effects

Orbital debris creates a special kind of externality, such that regulations to reduce orbital debris will generate benefits beyond the most straightforward kinds of direct benefits to U.S. space operations. The Commission should fully weigh all direct and indirect effects and should select the regulatory alternatives that best maximize the total net benefits. As the Commission suggests, regulations with net benefits will appropriately advance public interests and should be adopted even if there are some near-term regulatory costs.

In particular, the Commission should consider benefits from spillover effects, foreign reciprocity, and U.S. interests in foreign space operations. First, because of the cascading risks to other satellites from collisions triggered by orbital debris, risks that initially fall most directly on non-U.S. space operations may quickly spillover and directly affect U.S. space operations as well. The reductions of these spillover risks should be counted as benefits. Second, because of the leading role of the United States in space operations and policy, and because of the existing international frameworks, more efficient U.S. regulations of orbital debris risks may induce other countries to follow suit and adopt reciprocal regulations, which will in turn benefit U.S. space interests. These effects on foreign reciprocity should be counted as benefits. Third, U.S. citizens have investment, use, and other kinds of interests in space operations that are not directly licensed by U.S. agencies or owned by U.S. actors. The reduction in risk to such space operations should be counted as benefits of U.S. regulations as well.

Policy Integrity will expand on these topics in our reply comments.

Sincerely,

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<sup>4</sup> FCC, *Strategic Plan 2018-2022* at 13, <https://docs.fcc.gov/public/attachments/DOC-349143A1.pdf>.

<sup>5</sup> 58 Fed. Reg. 51,735 (Oct. 4, 1993); *see also* Office of Mgmt. & Budget, *Circular A-4* at 8-9 (encouraging agencies to consider marketable permits and offsets, as well as fees, penalties, subsidies, liability, bonds, insurance, or warranties).

<sup>6</sup> <https://www.acus.gov/sites/default/files/documents/Recommendation%202017-4%20%28Marketable%20Permits%29.pdf>

<sup>7</sup> <https://www.acus.gov/sites/default/files/documents/Marketable%20Permits%20Report-final.pdf>