

**STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY**

Re: *Mitigation of Orbital Debris in the New Space Age*, IB Docket No. 18-313.

It is clear that FCC orbital debris rules from 2004 are simply not adequate to protect space users from the potential threats presented by the collision of natural or human-created masses. Although technology has improved and new models are available to evaluate and mitigate space trash, a proliferation of manmade objects – literally projectiles of all sizes – continues hurtling through orbits used for satellites, spacecraft, and the international space station. And, this is before taking into account the thousands of new NGSO satellites being launched. For these reasons, I support today's efforts to update our orbital debris rules.

There has been much talk about what role, if any, the Commission has to play here. With this item, I'm pleased that the Chairman ultimately agrees with my position that the FCC is neither prohibited from acting nor should it act unilaterally. Ultimately, the FCC provides licenses or grants market access for these satellite services, so we play a role in the good stewardship of space, and, to that end, we must ensure that our rules are up to date. We can't sit on the sidelines, argue that we have no responsibility or authority over the issue, and pass the buck entirely to other agencies. While we do not know how many of these mega-constellations will go live, how many satellites will actually be launched, and whether these NGSO services will be successful in a competitive marketplace, we do know that things do not always go as planned. This is in no way a criticism of NGSOs or any particular company, but it is unlikely that all market entrants will succeed, leaving a potential vacuum for overseeing what happens to deployed assets. There are already reports of FCC-authorized satellites that did not operate or communicate as expected, one that reportedly got too close to another satellite, and an entity with launched NGSO satellites filed for bankruptcy. On the other hand, it is also not appropriate for the Commission to singlehandedly micromanage and attempt to regulate space. Not only must we consider the economic effects of burdensome regulation, but there are other agencies with far more expertise in certain aspects of space travel and orbital debris than the FCC. Therefore, an appropriate balance is needed.

Today's item achieves that balance. While the draft circulated prior to today's meeting had sections that caused me some concern, I thank the Chairman and my colleagues for accepting my suggestions for improvements. These included aligning our rules more closely with the collision and casualty risk compliance metrics set by an interagency body in which the FCC has participated. But, our work is far from over. Our rules and most of the work performed by other agencies center around the risk posed by orbital debris resulting from a single GSO satellite, not from constellations of thousands of satellites. Therefore, at my suggestion, we moved some issues from the Order to the Further Notice. Specifically, we seek further comment on mitigating the collision and casualty risks and what maneuverability is appropriate for these large constellations. It was apparent that some of the metrics in the circulated item would have forced total redesigns of planned networks or doomed projects altogether. It is of utmost importance that we mitigate the risk of orbital debris, while allowing satellite technology to progress, which could benefit so many Americans, especially in unserved areas.

Two other things of note. Today's item imposes numerous disclosure obligations on topics such as trackability, deployment devices used, the release of persistent liquids, and post-mission disposal. While there is no direct harm in collecting information, it often leads to unnecessarily costly burdens for industry, especially since it is may not be known how this information will be used in the future. I am also not sure the FCC has the total expertise needed to decide many of these matters on its own. This means that there must be close coordination with other expert agencies. We also need to figure out how case-by-case decisions made during the review of one entity's application – but which may serve as precedent for others – are made publicly available.

Finally, the FCC is seeking further comment on whether satellite companies should be required to indemnify the U.S. for any harm from their satellite operation. This is an issue that was appropriately moved to the further notice, joining the post-mission disposal bond proposal. Paying for long-term bonds

and determining the uncertain liability of indemnification will greatly increase overall costs, affect financing, and severely disadvantage small businesses, entrepreneurs, and new entrants. If the U.S. wants to be the leader in the current space race, our regulatory processes cannot be more expensive and burdensome than those of other nations. The U.S. has faced this problem in the past, and we have made strides to streamline our rules, but these kinds of ideas could tip the scales and force U.S. companies to go abroad once again.

This is not the last time the Commission will be looking into this matter, and I plan on following these issues closely. I fervently hope that the expert agencies and industry will work with us to ensure a safe orbital environment and preserve the limitless opportunities space provides, and that they understand that time is of the essence. These systems are being launched already, and we need to catch up.