

Modernizing EPFD Limits: A Widely Embraced Approach Across the Satellite Ecosystem

According to several recent filings at the U.S. Federal Communications Commission (FCC), many diverse stakeholders agree that modernized EPFD limits can improve broadband capacity, increase competition in the marketplace and lower costs to consumers – all while continuing to protect GSOs from harmful interference.

Here is some of their support:

REGULATORS

“... there is good reason to believe that [EPFD limits] may be overrestrictive and that there could be a different approach, which will still protect the GSOs and allow NGSOs to operate at much higher power levels. If that is the case, then these limits are creating substantial deadweight loss, because NGSO systems are forced to unnecessarily operate at lower power levels and therefore are limited in the broadband quality that they can deliver to consumers.” – [Jay Schwarz, Space Bureau Chief, FCC](#)

SATELLITE OPERATORS

“If the Commission is inclined to act unilaterally, then it should consider potential adjustments to the Ka-band EPFD limits.” – [SES](#)

“EchoStar supports the Commission’s fresh look at the current sharing framework, is willing to acknowledge that further technical analysis is necessary to evaluate the appropriateness of the current EPFD limits, and uniquely understands the need to modernize the rules under which NGSOs operate while preserving sufficient protection from harmful interference for GSOs.” – [EchoStar](#)

“The comments in this proceeding reflect broad support for revisiting the EPFD limits on NGSO systems in the Ku- and Ka-bands that were developed decades ago and were intended solely to protect GSO systems, without regard to the impact that overly restrictive limits have on NGSO systems.” – [Telesat](#)

THINK TANKS

“Modernizing the outdated EPFD limits would significantly enhance the performance of existing LEO systems. Research shows that modernized rules could boost broadband capacity by up to 180%, depending on the frequency band. With more efficient use of spectrum, LEO systems could achieve higher throughput with smaller satellite constellations, substantially reducing costs.” – [Chamber of Progress](#)

“The current EPFD framework imposes substantial economic costs, inhibits efficient spectrum use, and constrains the deployment of next-generation NGSO systems. By adopting a more flexible, performance-based regime—one that reflects actual system capabilities and minimizes unnecessary regulatory burdens—the Commission can unlock greater innovation, investment, and consumer benefits.” – [International Center for Law & Economics](#)

“... the rules are based on an outdated understanding of the NGSO-GSO satellite ecosystem, resulting in overrestrictive sharing rules that reduce the productivity of satellite spectrum and, in particular, prevent consumers from realizing the full potential of NGSO broadband service.” – [Information Technology and Innovation Foundation](#)

“The current EPFD rule was written in 1997 and took effect in 2000. Since then, satellite technology has rapidly advanced. Smaller, steerable beams on satellites and options for the geometry and design of new NGSO constellations create a reasonable case for reevaluating the 1997 formula. Improved spectral efficiency should be evaluated as the basis for a modernized EPFD rule.” – [Lexington Institute](#)

“The current rules overprotect GSO systems by incorporating by reference decades-old EPFD limits found in Article 22 of the International Telecommunications Union (‘ITU’) Radio Regulations.” – [Open Technology Institute and Public Knowledge](#)

“Updated EPFD rules that provide additional capacity for NGSO systems would be extremely helpful in closing the digital divide, as LEO broadband systems can reach households that are impractical for other technologies to reach.” – [Progressive Policy Institute](#)

TRADE GROUPS

“Modernizing the spectrum sharing framework and re-evaluating the long outdated Equivalent Power Flux Density (EPFD) limits, originally developed 25 years ago, to better align with today’s advanced satellite technology will help close the digital divide...” – [Commercial Space Federation](#)

“The ITU developed EPFD limits based on protection criteria that would assess impact of for unavailability (a short term protection metric) of an interfering system onto a GSO system respectively. However, when stakeholders identified the limits, they only reached consensus on the ‘short-term’ protections, leaving NGSOs with little flexibility and rules that do not reflect the NGSO landscape of 2025.” – [Computer & Communications Industry Association](#)

“... NGSOs would be able to serve more customers in a greater variety of markets, while potentially deploying fewer satellites. Greater competition in the broadband market could lead to improved service and reduced cost—both of which could drive increased broadband adoption.” – [NetChoice](#)

“The core issue is that the rules are built on a ‘worst-case’ philosophy while ignoring the advances and developments that would enable greater performance and usage... This forces NGSO operators to build in massive, unnecessary operational margins, which directly reduces the quality and availability of internet service for consumers.” – [Software & Information Industry Association](#)

“Updated coordination rules, if approached carefully and with due respect for the protection of existing networks, could allow NGSO systems to operate more efficiently, delivering faster high-speed services and lower costs for consumers while continuing to protect GSO and terrestrial wireless networks from harmful interference.” – [TechNet](#)