

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Single Network Future: Supplemental Coverage)	GN Docket No. 23-65
from Space)	
)	
Space Innovation)	IB Docket No. 22-271

COMMENTS OF THE DYNAMIC SPECTRUM ALLIANCE

The Dynamic Spectrum Alliance (“DSA”)¹ hereby responds to the Federal Communications Commission’s (“Commission”) Notice of Proposed Rulemaking (“NPRM”) on *Single Network Future: Supplemental Coverage from Space*.² The NPRM is timely as features and services that can integrate usage of satellite and terrestrial network spectrum continue to be announced.

The Commission recognizes the complexities associated with authorizing supplemental coverage from space (“SCS”) for mobile subscribers located in underserved and/or unserved areas within a terrestrial mobile service provider’s license area. Under the Commission’s

¹ The Dynamic Spectrum Alliance is a global, cross-industry alliance focused on increasing dynamic access to unused radio frequencies. The membership spans multinational companies, small- and medium-sized enterprises, academic, research, and other organizations from around the world, all working to create innovative solutions that will increase the utilization of available spectrum to the benefit of consumers and businesses alike. A full list of the DSA members is available on the DSA’s website at www.dynamicspectrumalliance.org/members/.

² *Single Network Future: Supplemental Coverage from Space*, GN Docket No. 23-65, Public Copy of Notice of Proposed Rulemaking, released on March 17, 2023. (NPRM)

proposed initial regulatory framework, SCS spectrum management appears straightforward and static, with heavy reliance on coordination through commercial agreements between different parties. The DSA assumes that, to the extent that an SCS offering relies on the use of satellite spot beams, minimized signal spillover can be achieved by appropriate programming of the satellite downlink to consumer handsets operating in underserved and/or unserved areas near the border of served areas. Provided that the Commission is flexible regarding the signal spillover for mobile handset users receiving a satellite signal in proximity to a border area, a more dynamic spectrum management mechanism should not be required.

The Commission seeks comment about extending its proposed regulatory framework to additional scenarios of which three are of particular interest to DSA:

- Spectrum bands with non-flexible use incumbent licensees;
- Geographically independent areas where collaborating terrestrial licensees hold all co-channel licenses and seek to provide SCS; and
- Adjacent geographic areas containing non-collaborating licensees.³

In the absence of commercial agreements, these scenarios may require a more dynamic spectrum management approach due to signal spillover to adjacent geographic areas containing non-collaborating licensees, particularly if multiple satellite operators are communicating with multiple mobile network operators.


Dynamic spectrum management techniques also could play a role if the Commission authorizes other terrestrial fixed devices (e.g., IoT sensors) to operate in the bands covered by the proposed Mobile Satellite Service footnote. If a consumer handset operates nearby to a

³ See NPRM at ¶¶ 133-145.

terrestrial fixed device on the same frequencies, either the fixed device needs to operate on a “no interference/no protection” basis, or a dynamic spectrum management capability needs to be used to allow the handset or terrestrial fixed device to switch frequencies within a short time. In this scenario, particular care would be necessary to design and implement a dynamic spectrum management mechanism to ensure that consumer privacy is appropriately protected.

The DSA and its members look forward to supporting the Commission’s efforts to create an initial framework for SCS and stand ready to facilitate implementation of any dynamic spectrum management needs now and in the future.

Respectfully submitted,



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