

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

In the Matter of Applications of)	
)	
DRS GLOBAL ENTERPRISE SOLUTIONS, INC.)	File Nos. 0008905503, 0008905504, 0008905616
)	
Request for Waiver of Channel Bandwidth)	
Limitations on Private Operational Fixed Point-to- Point Operations in the 6525 - 6875 MHz Band)	

MEMORANDUM OPINION AND ORDER

Adopted: May 13, 2021

Released: May 13, 2021

By the Chief, Broadband Division, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. In this *Memorandum Opinion and Order*, we grant, on a limited basis, the request for waiver filed by DRS Global Enterprise Solutions, Inc. (DRS) of certain channelization limitations in the 6525-6875 MHz band.¹ As discussed further below, this waiver is limited to the specific sites listed in the attachment to this Order.² We find that, in light of the unique factual circumstances of the instant case these waivers are justified because DRS has demonstrated that it has no reasonable alternative means – other than seeking waiver of channelization restrictions – to increase broadband/wireless backhaul capacity to the remote Alaskan villages of Allakaket and Alatna for purposes of providing telemedicine, education, and emergency services.

II. BACKGROUND

2. The 6525-6875 MHz band (Upper 6 GHz Band) is currently available for terrestrial Fixed Services (FS).³ In 2010, the Commission provided terrestrial FS licensees in the band with authority to operate channels with bandwidths as wide as 30 megahertz, making available an additional source of spectrum for high-capacity microwave links.⁴

3. On December 6, 2019, DRS filed a petition requesting waivers of channel bandwidth limitations in the Upper 6 GHz Band to expand its rural broadband coverage to the remote Alaskan villages of Allakaket and Alatna, AK.⁵ DRS seeks authorization to deploy private operational fixed point-to-point microwave service using wider, 60 megahertz channels across the Upper 6 GHz Band in a

¹ See Waiver Request, DRS Global Enterprise Solutions, Inc., File Nos. 0008905503, 0008905504, 0008905616 (filed Dec. 6, 2019), (Waiver Request).

² See File Nos. 0008905503, 0008905504, 0008905616 (filed Dec. 6, 2019) (Applications).

³ See 47 CFR §§ 101.147(a), (k).

⁴ *Amendment of Part 101 of the Commission's Rules to Accommodate 30 Megahertz Channels in the 6525-6875 MHz Band*, Report and Order, 25 FCC Rcd 7760, 7767, para. 16 (2010).

⁵ See Amended Waiver Request, DRS Global Enterprise Solutions, Inc., File Nos. 0008905503, 0008905504, 0008905616 (filed Mar. 25, 2020), (Waiver Request). DRS filed its original waiver request on December 6, 2019.

narrowly defined area of rural Alaska.⁶ In its amended request, DRS specifies that it plans to expand connectivity to health clinics in both villages and a school in Alatna.⁷ The clinics are operated by the Tanana Chiefs Conference and the school is part of the Yukon-Koyukuk School District.⁸ Both entities receive federal and state funding to defray the high cost of rural broadband.⁹

4. Specifically, DRS requests that the Wireless Telecommunications Bureau waive Sections 101.109(c) and 101.147(l) of the Commission's rules, which together limit the maximum authorized bandwidth in the Upper 6 GHz Band to 30 megahertz.¹⁰ It contends waiver of these two rules would "allow [DRS] to keep the cost of infrastructure buildout as low as possible...[and] support rural broadband expansion while maximizing the government's return on spending."¹¹ DRS contends a single channel 60 megahertz wide would use the same bandwidth as two 30 megahertz channels but do so with greater spectral efficiency.¹²

5. DRS states that using the Lower 6 GHz or 11 GHz bands – the remaining two bands with adequate propagation characteristics for the planned 33 mile and 42 mile links – are not viable options given the circumstances.¹³ Interference in the Lower 6 GHz band conflicts with current earth station licenses there and operation in the 11 GHz band would require space diversity and additional radio equipment.¹⁴

6. Public notice of the filing of the Applications was given on December 11, 2019.¹⁵ No petitions to deny, objections, or comments were filed.

III. DISCUSSION

7. Section 1.925(b)(3) of the Commission's rules¹⁶ requires parties seeking a waiver to demonstrate that:

(i) The underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or

(ii) In view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.

Based on the record before us, DRS has justified waivers of the Commission's rules under the second prong of the waiver standard. Specifically, DRS has demonstrated that for the provision of wireless backhaul to the health clinics and the school in these two remote Alaskan villages, it has no reasonable

⁶ *See id.*

⁷ *See* Waiver Request.

⁸ *See id.*

⁹ *See id.*

¹⁰ *Id.* Although DRS requests waiver of § 101.147(l), in the most recent revision of Part 101, the rule addressing the bandwidth limits for frequencies in the 6525-6875 MHz band appears in § 101.147(k). Thus, this *Memorandum Opinion and Order* pertains to waiver of §§ 101.109(c) and 101.147(k).

¹¹ Waiver Request.

¹² *Id.*

¹³ *See id.*

¹⁴ *See id.*

¹⁵ *Wireless Telecommunications Bureau Market-Based Applications Accepted for Filing*, Report No. 14573 (WTB Dec. 11, 2019) at 64-65.

¹⁶ 47 CFR § 1.925(b)(3).

alternative to using the Upper 6 GHz band with the requested channelization.

8. In reaching our decision, we recognize that DRS proposes to use spectrum in the Upper 6 GHz Band in extremely remote locations in Alaska.¹⁷ We have previously noted that carriers face unique circumstances deploying broadband-capable networks in Alaska including Alaska's large size, varied terrain, harsh climate, isolated populations, limited availability of personnel to construct networks and shortened construction season.¹⁸ DRS has stated that use of landlines as an alternative to achieve its ends is not possible due to terrain.¹⁹ We have previously recognized assertions that building fiber to all Alaskan locations is infeasible because much of Alaska is covered by a thick layer of permafrost that not only makes the initial trenching process difficult and costly, but can damage fiber and other buried communications equipment as it undergoes changes over time.²⁰ Accordingly, requiring DRS to lay landlines or fiber as an alternative to using wireless backhaul for the sites listed in DRS's Waiver Request would be unduly burdensome.

9. We also note that requiring DRS to use other spectrum bands would be infeasible or unduly burdensome, given the lengths of the paths in question (33 miles and 42 miles, respectively). DRS argues that because the 11 GHz band has shorter range than the 6 GHz band, use of the 11 GHz band would require space diversity and additional radio equipment.²¹ The attendant cost of deployment in the 11 GHz band would therefore be so expensive that it does not represent a reasonable alternative to the Upper 6 GHz band.²² DRS has also asserted that deployment of the service in the Lower 6 GHz band is not possible, as two earth station licenses located at the Indian Mountain repeater site block all Lower 6 GHz Band spectrum availability.²³ Given that numerous small communities in remote Alaska lack access to adequate broadband service, we believe that granting these waivers serves the public interest by fostering provision of broadband service in communities in Alaska where it will support education, telemedicine, and emergency services.²⁴

10. We conclude that DRS has justified a waiver of Section 101.109(c) of the Commission's rules to allow the use of 60 megahertz channels in the Upper 6 GHz Band. DRS "note[s] that the use of wider 60 MHz channels requires the same bandwidth as two 30 MHz channels but will be more spectrally efficient."²⁵ We agree with DRS that a waiver will be more efficient under the circumstances presented. Our decision will allow DRS to provide more capacity and offer high-speed access to its rural customers. We also conclude that for the above-stated reasons, DRS has also justified its waiver request for Section 101.147(k) of the Commission's rules, thereby allowing DRS to operate 60 megahertz channels in the Upper 6 GHz Band.

IV. CONCLUSION AND ORDERING CLAUSES

11. DRS has justified waivers of the Commission's rules to allow it to provide private operational fixed point-to-point microwave service in the 6525–6875 MHz band using 60 megahertz-wide channels.

¹⁷ See Waiver Request.

¹⁸ See *Petition of General Communication, Inc. for Waiver of Certain Channelization and Other Restrictions on Common Carrier Fixed Point-to-Point Operations Between 6425 and 7125 MHz*, Memorandum Opinion and Order, 31 FCC Rcd 11792, 11796, para. 12 (WTB BD 2016) (*GCI Waiver Order*).

¹⁹ Waiver Request.

²⁰ See *GCI Waiver Order*, 31 FCC Rcd at 11796, para. 12.

²¹ See Waiver Request.

²² See *id.*

²³ See *id.*

²⁴ See *GCI Waiver Order*, 31 FCC Rcd at 11802, para. 25.

²⁵ Waiver Request.

We therefore grant its Waiver Request.

12. ACCORDINGLY, IT IS ORDERED that pursuant to Sections 4(i) and 309 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 309, and Section 1.925 of the Commission's Rules, 47 CFR § 1.925, that by the waiver request filed DRS Global Enterprise Solutions, Inc. IS GRANTED.

13. IT IS FURTHER ORDERED that the licensing staff of the Broadband Division SHALL PROCESS the pending applications of DRS Global Enterprise Solutions, Inc. (File Nos. 0008905503, 0008905504, 0008905616) in accordance with this *Memorandum Opinion and Order* and the applicable Commission rules.

14. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 CFR §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Blaise A. Scinto
Chief, Broadband Division
Wireless Telecommunications Bureau