

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

In the Matter of	)	
	)	
Mangata Networks LLC	)	Call Sign S3014
	)	SAT-PDR-20200526-00054
Petition for a Declaratory Ruling	)	
Granting Access to the U.S. Market	)	
For the Mangata Networks System	)	

**REPLY TO OPPOSITION**

In its Petition to Deny,<sup>1</sup> Iridium Constellation LLC (“Iridium”) urged the Commission to reject Mangata Networks LLC (“Mangata”)’s non-conforming proposal to use the NGSO MSS Feeder-Link Bands (19.4-19.6 GHz and 29.1-29.5 GHz) for FSS service and feeder links, and for MSS feeder links. Iridium argued that, at most, the Commission could permit MSS feeder links subject to prudential licensing conditions—but that even MSS feeder-link authority would be unwise and unnecessary.

Mangata filed a belated Opposition on September 24, 2020.<sup>2</sup> It utterly failed to justify a waiver that would permit general FSS operations in these frequencies. Accordingly, Mangata’s petition must be denied to the extent it seeks access to the NGSO MSS Feeder-Link Bands for FSS service and feeder links.

With respect to MSS feeder links, Mangata acknowledges that the Commission “never intended for more than three NGSO MSS systems to share” the NGSO MSS Feeder-Link

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<sup>1</sup> Petition to Deny In Part of Iridium Constellation LLC, IBFS File No. SAT-PDR-20200526-00054 (filed Sept. 8, 2020) (“Iridium PTD”).

<sup>2</sup> Consolidated Reply Comments of Mangata Networks, LLC, IBFS File No. SAT-PDR-20200526-00054 (filed Sept. 24, 2020) (“Opposition”). The Opposition was due on September 23<sup>rd</sup> and the Commission has the authority simply to dismiss it.

Bands.<sup>3</sup> Nevertheless, it fails to demonstrate that authorizing Mangata as a fourth licensee would serve the public interest. Accordingly, the Commission also should deny Mangata's request to operate MSS feeder links in these frequencies. At a minimum, it should condition such access on (1) advance coordination with Iridium and (2) use of the frequencies exclusively to support terminals licensed in the MSS. Mangata did not oppose these common-sense conditions.

## DISCUSSION

### I. THE COMMISSION MUST DENY MANGATA'S PROPOSAL TO OPERATE NGSO FSS SERVICE AND FEEDER LINKS IN THE NGSO MSS BAND.

Mangata acknowledges that the Ka-band Plan and the U.S. Table of Frequency Allocations limits use of the 19.4-19.6 GHz and 29.1-29.5 GHz bands by NGSO systems to NGSO feeder links that support MSS earth stations.<sup>4</sup> It nevertheless asks the Commission to waive the band plan and allocation table to permit Mangata to engage in general FSS operations in these frequencies. But as Iridium explained in its petition, such a waiver would be plainly inappropriate, because Mangata's application:

- contains no showing whatsoever as to the potential for its non-conforming gateway earth stations and user terminals to interfere with Iridium's feeder-link operations.
- contains no showing whatsoever as to the extent its non-conforming earth stations and user terminals might receive interference from Iridium's feeder-link operations.

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<sup>3</sup> Opposition at 4.

<sup>4</sup> *Id.* at 3; see 47 C.F.R. § 2.106 at NG166 (limiting the use of 19.4-19.6 GHz and 29.1-29.25 GHz by the FSS to feeder links for NGSO systems in the MSS); *id.* at NG535A (limiting the use of 29.25-29.5 GHz by the FSS to GSO systems and feeder links for NGSO systems in the MSS). See *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd. 7809, 7850 App. B (2017).

- does not identify any need whatsoever for accessing this spectrum given the vast Ka-band resources already available to NGSO FSS systems on a conforming basis.<sup>5</sup>

Nothing in Mangata’s Opposition bridges these yawning gaps in its waiver request.

While Mangata “reiterate[s] its commitment to coordinating” with other operators, it still has not shown that it can deconflict its proposed operations with those of existing licensees like Iridium.<sup>6</sup>

That omission is especially striking given Mangata’s request to deploy FSS user terminals in these bands, which raise even more significant compatibility issues than gateway earth stations.

Even in its technical narrative, Mangata made no mention of how FSS user terminals might operate compatibly with Iridium’s network. Instead, the technical discussion merely cited to a rule discussing coordination of MSS feeder-link complexes.<sup>7</sup>

Mangata still has not shown a need for these frequencies in any event. It merely reiterates its desire to provide services to the public, without demonstrating—or even claiming—that its system would be constrained absent non-conforming access to the NGSO MSS Feeder-Link Bands. Nor could it reasonably make that showing. The new generation of NGSO FSS systems like Mangata’s already have access to approximately two gigahertz of spectrum in the Ka-band in each direction on a conforming basis, making non-conforming use of the limited bandwidth available in 19.4-19.6 GHz and 29.1-29.5 GHz completely unnecessary.

Finally, in recent years, the Commission has twice declined to consider authorizing general NGSO FSS use of the NGSO MSS Feeder-Link Bands, as Mangata has now requested.<sup>8</sup>

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<sup>5</sup> Iridium PTD at 3-4.

<sup>6</sup> Opposition at 3-4.

<sup>7</sup> Application of Mangata Networks LLC, IBFS File No. SAT-PDR-20200526-00054, Technical Narrative to Supplement Schedule S, at 41-42 (filed May 26, 2020).

<sup>8</sup> *Facilitating the Communications of Earth Stations in Motion with Non-Geostationary Orbit Space Stations et al.*, Second Report and Order in IB Docket No. 17-95 and Report and Order in IB Docket No. 18-315 and Further Notice of Proposed Rulemaking, 35 FCC Rcd. 5137 ¶25 (2020) (“*NGSO ESIMs Order*”); *Update to*

Against this backdrop, Mangata’s barely supported waiver request is completely indefensible. The Commission therefore must deny Mangata’s petition to operate FSS feeder and service links in the MSS Feeder-Link Bands. The request is inconsistent with the Commission’s Ka-band Plan, the U.S. Table of Frequency Allocations, and recent decisions on NGSO FSS spectrum use, and Mangata has not come close to meeting the stringent requirements for a waiver.

**II. THE COMMISSION SHOULD DENY MANGATA’S PROPOSAL TO OPERATE NGSO MSS FEEDER LINKS—OR STRICTLY CONDITION ANY SUCH USE.**

Mangata also proposes to operate feeder links in the 19.4-19.6 GHz and 29.1-29.5 GHz bands that would support MSS earth stations. This request depends on a waiver that would allow Mangata to operate in the MSS on a non-conforming basis in 19.7-20.2 GHz and 29.5-30.0 GHz. Because the MSS earth stations would be the same earth stations Mangata would be operating as FSS, however, the only conceivable rationale behind the non-conforming MSS designation would be to provide Mangata with access to the NGSO MSS Feeder-Link Bands.<sup>9</sup> As Iridium explained in its Petition, that rationale cannot justify the waiver that Mangata seeks<sup>10</sup>—and Mangata fails to demonstrate otherwise in its Opposition.

First, the Commission only intended for at most three NGSO MSS systems to share this scarce feeder link spectrum, and authorizing Mangata as a fourth licensee would contribute to a deteriorating interference environment.<sup>11</sup> In its Opposition, Mangata “does not dispute” that the

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*Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd. 7809 ¶¶18&n.40, 20 (2017).

<sup>9</sup> See Application of Mangata Networks LLC, IBFS File No. SAT-PDR-20200526-00054, Legal Narrative at 15 (filed May 26, 2020) (“Legal Narrative”).

<sup>10</sup> Iridium PTD at 4-5.

<sup>11</sup> *Id.* at 4-5; see also *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and For Fixed Satellite Services*, First Report and Order and Fourth Notice of Proposed Rulemaking, 11 FCC Rcd. 19005, 19032, ¶ 66 (1996).

“Commission never intended for more than three NGSO MSS systems to share the feeder link spectrum, and that currently, Iridium, O3b, and Kuiper are licensed to operate in this band.”<sup>12</sup> It simply claims that the Commission should buck its precedent in light of Mangata’s “strong belie[f] that there are operational and technological methods that enable more than three satellite systems to share this band.”<sup>13</sup> But the Commission cannot change policy based on the mere beliefs of a self-interested applicant, however fervently the applicant may hold them. And Mangata has not supplied any evidence to support its contention; indeed, it does not even identify the “operational and technological methods” it proposes to use in these bands.

Second, as explained above,<sup>14</sup> Mangata has not shown a need for a waiver. It does not need a non-conforming MSS designation because it can operate the same terminals as an application of the FSS pursuant to the Commission’s recently adopted NGSO ESIMs rules.<sup>15</sup> Likewise, Mangata cannot explain why the current Ka-band plan, which provides vast spectral resources to NGSO FSS systems like Mangata’s, is somehow insufficient for its specific system. Because Mangata’s proposed system will be able to operate as intended without access to the NGSO MSS Feeder-Link Bands, there is no reason for the Commission to deviate from its past decisions governing the use of these frequencies.

Finally, Iridium notes that Mangata filed its Opposition late and without indicating the method of service. Pursuant to Sections 25.154(c) and 1.4(h) of the Commission’s rules, any opposition to Iridium’s petition to deny was due September 23, 2020. Mangata filed on September 24, 2020. Evidently, Mangata has trouble complying even with straightforward

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<sup>12</sup> Opposition at 4.

<sup>13</sup> *Id.*

<sup>14</sup> *See supra* p.3.

<sup>15</sup> *See* Legal Narrative at 15; *NGSO ESIMs Order*, 35 FCC Rcd. 5137 ¶¶28-29.

procedural rules established by the Commission. There is no way it should receive a waiver based on commitments that will be far more difficult and complicated to keep than a filing deadline.

If the Commission nevertheless allows Mangata to operate MSS feeder links in the NGSO MSS Feeder-Link Bands, it should adopt the licensing conditions proposed by Iridium. Specifically, it should require Mangata—before beginning operations—to coordinate with all previously authorized NGSO MSS systems in the NGSO MSS Feeder-Link Bands, including Iridium. O3b expressed support for similar protections.<sup>16</sup> In addition, the Commission should limit Mangata’s use of the bands to feeder links that support terminals licensed in the MSS. This means the spectrum cannot be used to carry traffic from terminals licensed in the FSS. Mangata has not opposed either condition.

### CONCLUSION

The Commission should deny Mangata’s request to operate in the 19.4-19.6 GHz and 29.1-29.5 GHz bands. At a minimum, it should limit any use of these bands to MSS feeder links alone, and condition MSS feeder-link access on successful coordination with Iridium prior to operations and on feeder-link operations that exclusively support terminals licensed in the MSS.

Respectfully submitted,



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September 30, 2020

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<sup>16</sup> See Petition To Deny or Condition of O3b Limited, IBFS File No. SAT-PDR-20200526-00054, at 8 (filed Sept. 8, 2020).

## CERTIFICATE OF SERVICE

I hereby certify that on September 30, 2020, a copy of the foregoing Reply to Opposition was served on the following parties in the manner indicated below:

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