



September 27, 2021

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
45 L Street, N.E.
Washington, DC 20554

Re: *WT Docket No. 20-443; GN Docket No. 17-183*

Dear Ms. Dortch:

The Commission issued a Notice of Proposed Rulemaking in January that unanimously rejected efforts by Multipoint Video and Data Distribution Service (“MVDDS”) operators such as RS Access, LLC (“RS Access”) to evict next-generation non-geostationary orbit (“NGSO”) satellite operators from the 12.2–12.7 GHz band (the “12 GHz band”). The record was clear based on the MVDDS licensees’ previous technical studies that mobile services could not operate in the 12 GHz band without causing significant interference to NGSO systems.¹ As such, the Commission concluded that it could act only if RS Access (or any other MVDDS operator) clearly demonstrated that increased terrestrial operations would protect next-generation satellite services in the band.² In response, only one MVDDS speculator—RS Access—made any attempt at this futile exercise through its surrogate RKF Engineering Solutions, LLC (“RKF”).³ Yet, even if the Commission were to accept RKF’s flawed assumptions as true, this submission still showed harm to tens of thousands of people. Given that the record demonstrates conclusively that the RKF submission was flawed from the start, was based on no real understanding of NGSO systems (and in particular, the one operated by Space Exploration Holdings, LLC (“SpaceX”)), and presents no meaningful analysis on which the Commission can rely, the Commission can swiftly close this proceeding and eliminate the regulatory uncertainty clouding service to Americans already intensively using the 12 GHz band.

RS Access promised but withheld the RKF Report for months. Once the report was finally revealed, SpaceX and other NGSO operators demonstrated deep flaws underlying several of the

¹ See, e.g., Tom Peters, MVDDS 12.2-12.7 GHz Co-Primary Service Coexistence (June 8, 2016) (“[C]oexistence between MVDDS 5G operations and NGSO FSS operations is not possible.”), *as attached to* Comments of MVDDS 5G Coalition, WT Docket No. RM-11768, Attachment I at 4 (filed June 8, 2016); Letter from Alison Minea to Marlene H. Dortch, IBFS File No. SAT-MOD-20180319-00022, Docket No. RM-11768, at 3 (Dec. 2, 2019) (“[C]urrent sharing of spectrum between co-primary 5G and NGSO FSS operations is not viable in the 12 GHz Band.”).

² See *Expanding Flexible Use of the 12.2-12.7 GHz Band*, 36 FCC Rcd. 606 ¶ 2 (2021) (“*NPRM*”) (expressly restricting the proceeding to only those changes that could be made “without causing harmful interference to incumbent licensees”).

³ See RKF Engineering Solutions, LLC, Assessment of Feasibility of Coexistence between NGSO FSS Earth Stations and 5G Operations in the 12.2-12.7 GHz Band (“RKF Report”), *as attached to* Comments of RS Access, LLC, WT Docket No. 20-443 and GN Docket No. 17-183, Appendix A (May 7, 2021).

major assumptions and provided more reasonable parameters where appropriate.⁴ Indeed, the criticism of RKF's submission from other parties has been strong, widespread, and robust. These critiques come from many parties with varying interests, including parties that rarely align on other issues.⁵ Yet these criticisms consistently demonstrate that RKF's submission lacks a fundamental understanding of how the 12 GHz band is actually used and, more importantly, how customers are served. As many commenters pointed out, RKF's assumptions not only conflicted with reality, they often conflicted with the advocacy of its own financial sponsors. In addition, RKF has not offered to make the software underlying its simulations available for review by others, such as those with more experience with the operation of NGSO systems.

SpaceX followed up its detailed analysis with a summary *ex parte* presentation.⁶ Despite the widespread criticism of its analysis, for some reason, RKF's response focuses only on that single high-level slide deck by one party, while leaving most criticisms of its submission (including several arguments from the one slide deck it *does* deign to acknowledge) completely unanswered.⁷ Meanwhile, despite great effort, its financial sponsor has struggled to find supporters of the submission that do not have direct financial ties to an MVDDS licensee.

Moreover, despite its single-minded focus on SpaceX, RKF's submission is not based on any expertise or special knowledge about SpaceX's system or how SpaceX coordinates with others. Worse, although RKF asserts that "[w]e rely on the data that is made available to us,"⁸ when presented with actual data from SpaceX and other commenters that would undermine its conclusions, RKF chooses to ignore that information rather than revise its analysis.

As demonstrated below, RKF's analysis is not reproducible and its response is evasive, incomplete, and defensive. Indeed, it simply highlights the MVDDS supporters' willingness to cherry-pick their assumptions to reach the predetermined conclusions pushed by their financial backers. The Commission should recognize that this flawed analysis provides no basis for issuing the necessary further notice required before considering expanded terrestrial rights in this critical satellite band. Below we address several flaws in RKF's initial submission and its inadequate and defensive responses thereto.

Effect of other NGSO systems and spectrum sharing. Tellingly, RKF has steadfastly refused to include NGSOs other than SpaceX in its analysis, which is contrary to Commission

⁴ See, e.g., Reply Comments of Space Exploration Holdings, LLC at 4-18 (July 7, 2021) ("SpaceX Reply Comments"); Reply Comments of OneWeb, LLC at 13-31 (July 7, 2021); Reply Comments of Kepler Communications Inc. at 3-5 (July 7, 2021). Unless otherwise noted, all reply comments cited herein were filed in WT Docket No. 20-443 and GN Docket No. 17-183.

⁵ See, e.g., Reply Comments of AT&T Services, Inc. at 14-21 (July 7, 2021); Reply Comments of The Boeing Company at 7-10 (July 7, 2021); Reply Comments of Google LLC at 13-14 (July 7, 2021); Reply Comments of Intelsat License LLC at 2-5 (July 7, 2021); Reply Comments of Microsoft Corporation at 8-13 (filed July 7, 2021); Reply Comments of SES S.A. at 7-8 (July 7, 2021).

⁶ See Letter from David Goldman to Marlene H. Dortch, WT Docket No. 20-443 and GN Docket No. 17-183 (filed Aug. 2, 2021) ("SpaceX Ex Parte").

⁷ See Letter from David Marshack to Marlene H. Dortch, WT Docket No. 20-443 (Aug. 9, 2021) ("RKF Response").

⁸ *Id.* at 7.

goals and the facts on the ground. This exclusion is no small oversight. In making this demonstrably false assumption, RKF concludes that SpaceX would have 1.5 GHz of alternative Ku-band spectrum outside the 12 GHz band that it is free to use to avoid interference from terrestrial operations.⁹ Accordingly, in its simulation, RKF randomly assigns one of eight 250 MHz channels to each SpaceX user terminal.¹⁰ Critically, this assumption has been debunked in the record repeatedly and demonstrates the fundamental misunderstanding about how NGSOs operate and coordinate that RKF embeds in its submission.

Unlike terrestrial licensees such as DISH Network that enjoy abundant exclusive spectrum rights, next-generation satellite systems do not have exclusive rights to any spectrum. Instead, NGSOs share the Ku-band spectrum available for downlink operations with each other and with other technologies. In the absence of coordination, NGSO systems are required to divide the spectrum whenever the increase in noise temperature of one system ($\Delta T/T$) exceeds 6% due to interference from emissions of another system.¹¹ Accordingly, under these default rules, instead of having access to all 2 GHz of downlink spectrum at any given time, an NGSO operator would instead be able to use only one-half, one-third, or even less of that spectrum.

In addition, SpaceX has often explained that it must also share most of this spectrum with terrestrial operators. For example, NGSO systems operate in the 10.7-11.7 GHz band on an unprotected, non-interference basis with respect to fixed service links—of which there are more than 880,000 across the United States.¹² RKF totally ignored these links in its original analysis, but now grudgingly admits that it is examining their potential impact in limiting the flexibility of NGSO systems.¹³ Similarly, NGSO systems must protect Radio Astronomy facilities operating in the 10.6-10.7 GHz band, constraining their ability to use the 10.7-10.95 GHz band. While RKF's submission is not based on any information about how coordination with Radio Astronomy facilities actually works, it nonetheless spends several paragraphs arguing that NGSO systems could still use this spectrum in some portions of the United States—but continues to defend its analysis that fails to recognize this limitation in *any* portion of the country. Moreover, RKF does not even undertake to review the potential impact of this limitation on its analysis.¹⁴

RKF also resorts to another unfortunate tactic employed by its backers—its willingness to impose harmful burdens on users of satellite systems while refusing to suggest any limitations on terrestrial licensees. RKF does not consider having the terrestrial operator switch to alternative spectrum whenever its system would otherwise cause interference to an NGSO user terminal, even after the Commission noted in the NPRM that “the Commission has made a substantial amount of spectrum available for 5G services in the period since the 5G MVDDS Coalition filed its Petition,” including “nearly five gigahertz of high-band spectrum.”¹⁵ This omission is particularly striking considering that DISH Network is both the largest holder of MVDDS licenses and the largest

⁹ See RKF Report at 23.

¹⁰ See *id.* at 48.

¹¹ See 47 C.F.R. § 25.261(c).

¹² See SpaceX Reply at 11.

¹³ See RKF Response at 9.

¹⁴ See *id.* at 8-9.

¹⁵ NPRM ¶ 58.

holder of unused mid-band spectrum licenses. RKF strains to ensure it puts no limitations on its sponsors, even at the expense of people actually relying on next-generation satellite systems.

Rural/urban deployment assumptions. RKF resorts to Orwellian doublespeak and logical contortions to obfuscate the rural/urban divide assumed in its analysis without actually committing its benefactors to the associated rules. For SpaceX's system, RKF's model assumes only 1.07% of SpaceX user terminals will operate in metropolitan Partial Economic Areas ("PEAs") where RKF assumes the vast majority of 12 GHz terrestrial transmitters will operate.¹⁶ Yet for the terrestrial systems, RKF's model assumes a paltry 10% of the population in non-metropolitan PEAs are covered by a 12 GHz terrestrial transmitter. And given that RKF also puts those transmitters in "the most densely populated census tracts" in each non-metropolitan PEA,¹⁷ much more than 90% of the area of such PEAs would likely fall outside the signal range of a 12 GHz base station or mobile user—as would any SpaceX user terminal placed in that area. As a result, despite RKF's semantic gymnastics, the assumptions underlying its analysis effectively sort most terrestrial transmitters into urban and relatively high-density non-metropolitan areas and SpaceX terminals into rural areas unlikely to be affected by operations of those transmitters—helping to decrease apparent interference. Nonetheless, RKF continues to argue that its secret siting algorithm was designed "to avoid reliance on selective or artificially favorable geographic separation distances."¹⁸ To the contrary, its methodology effectively results in such a favorable separation—yet, as is always the case, neither RKF nor its MVDDS sponsors propose any rules that would require an eventual 12 GHz terrestrial licensee to follow anything resembling RKF's deployment strategy.

RS Access and other MVDDS operators have also argued that they should be given additional terrestrial rights in their licensed areas.¹⁹ Nonetheless, RKF chose to ignore the 210 MVDDS license areas based on Designated Market Areas and instead model its 12 GHz terrestrial deployment based on 406 PEAs.²⁰ Accordingly, RKF's model does not even line up with the other advocacy of its sponsor.

Number and characteristics of NGSO user terminals. RKF claims to want more information from SpaceX, but then refuses to accept it when offered. To be clear, SpaceX has provided unprecedented detail about the operations of its system including voluminous technical specification on the public record, whereas RKF's sponsors have provided nothing but shifting vague claims about whatever technology the eventual owner of its spectrum will employ. But despite RKF's complaints, it discounts any data from SpaceX unless it fits the predetermined conclusions of its sponsors.

Take, for example, the number and characteristics of blanket licensed user terminals assumed to be deployed by NGSO operators. RKF assumed that SpaceX (and only SpaceX) would

¹⁶ See RKF Report at 21.

¹⁷ *Id.* at 27.

¹⁸ RKF Response at 3.

¹⁹ See, e.g., Comments of RS Access, LLC, WT Docket No. 20-443 and GN Docket No. 17-183, at 54-56 (May 7, 2021) (arguing that "it serves the public interest to give MVDDS licensees greater flexible-use rights").

²⁰ See RKF Report at 5-6.

deploy up to 2.5 million terminals. In doing so, RKF ignored SpaceX’s pending application for authority to deploy up to five million terminals.²¹ RKF defends this assumption based on “industry analysis from MoffettNathanson.”²² In other words, RKF is willing to disregard the observable activities of a satellite operator that is investing billions of dollars in its NGSO system in favor of an analysis by an equity sell-side boutique that—like RKF—has no genuine insight into the operations of the SpaceX NGSO system. RKF makes the absurd assumption that SpaceX would invest in a system that is not capable of supporting itself. But RKF does not even consistently apply its own purported methodology, as even the analysis on which it relies concluded that SpaceX could expand to six million customers as its constellation continues to grow. Nonetheless, RKF’s analysis limits the SpaceX deployment to just 2.5 million users.

Even putting that aside, SpaceX also noted that RKF had completely omitted consideration of other NGSO operators authorized to provide service in the 12 GHz band.²³ These operators have very different business models, deployment plans, and user terminal parameters that RKF utterly failed to consider—including authority to operate at even lower elevation angles than SpaceX. Indeed, OneWeb is currently authorized to operate up to 1.9 million user terminals in the 12 GHz band, yet is entirely ignored in RKF’s analysis.²⁴ Rather than acknowledge the validity of this critique, RKF baldly asserts that “the statistical validity of the study” would be the same no matter how many NGSO terminals were deployed and regardless of their characteristics.²⁵ If that is the case, then RKF once again demonstrates its lack of actual knowledge about NGSOs, as its analysis is so divorced from operational reality as to render it completely useless. If RKF would produce the software it uses for its simulation, engineers with actual knowledge of these systems may be able to identify the flaws more specifically.

Moreover, RKF’s new claim that the number of NGSO terminals is irrelevant conflicts with its own vehement defense of its decision to limit that number to just 2.5 million. If this number is truly as irrelevant as RKF claims, RKF could have made more realistic assumptions of next-generation satellite consumers, based on the five million terminals SpaceX has applied for, the 1.9 million OneWeb is authorized to operate, and a commensurate number for other NGSO systems authorized to operate in the band. But while RKF’s assertion that its simulation is not influenced by the number of satellite users is impossible to confirm, whether it is or not, the number of terminals *does* matter in reality, as more terminals yield more opportunities for interference. For example, even assuming that RKF is correct that the number of NGSO customers that would suffer interference scales linearly in its simulation (which also cannot be confirmed), increasing the number of consumers using satellite services by, say, three or four times will yield three of

²¹ See Modification Application, IBFS File No. SES-MOD-20200731-00807 (July 31, 2020). Moreover, contrary to RKF’s insinuation that SpaceX filed this application after RKF submitted its analysis (see RKF Response at 5 (defending its choice to assume 2.5 million terminals “instead of the five million fixed user terminals for which SpaceX has since applied”)), SpaceX actually filed over nine months earlier—a fact of which RS Access was well aware, given that it commented on that application. See Comments of RS Access, LLC, IBFS File No. SES-MOD-20200731-00807 (Nov. 6, 2020).

²² RKF Response at 4.

²³ See SpaceX Ex Parte, Attachment at 3-5; SpaceX Reply Comments at 8 n.14.

²⁴ See Radio Station Authorizations, IBFS File Nos. SES-LIC-20190930-01217 and SES-LIC-20190930-01237 (issued Apr. 27, 2021 and Apr. 29, 2021, respectively).

²⁵ See RKF Response at 5.

four times more people who will be harmed. Given that RKF's analysis already indicates that tens of thousands of SpaceX subscribers would experience interference in violation of the direction from the Commission, RKF cannot once again callously disclaim the tens or hundreds of thousands more people who would be harmed by using a more realistic estimate of next-generation satellite users.

Similarly, because RKF's analysis lacks any real understanding of SpaceX's system, RKF made inaccurate assumptions about the antenna gain of SpaceX's terminals. But now RKF refuses to accept the definitive information when SpaceX provides it. In particular, because it did not know the actual gain pattern of SpaceX's user terminal antennas, RKF incorrectly guessed that the relevant gain pattern would conform to an ITU reference pattern.²⁶ SpaceX thereafter provided "the applicable ETSI standard for user terminals such as those employed in the Starlink system"²⁷—an inherently global system that deploys user terminals in Europe as well as the United States. Rather than accept this information and incorporate it into its analysis—or provide the software underlying its model to allow others to do so—RKF instead baselessly questions whether SpaceX terminals perform at that ETSI standard.²⁸ Here again, RKF chooses to reject information from SpaceX that would not support the conclusions its sponsor hopes to reach. Although SpaceX believes that the record is abundantly clear, it once again confirms that its terminals comply with the ETSI standard.

Elevation angles. Although RKF recognizes that SpaceX's license was recently modified to allow communications with user terminals at elevation angles as low as 25 degrees, it nonetheless asserts that "most Starlink terminals will have look angles of between 55 and 85 degrees" and used that assumption in its analysis.²⁹ In both its reply comments and ex parte, SpaceX provided the actual distribution of the elevation angles for its system based on actual experience and the way the system was engineered to operate.³⁰ This corrected data shows that user terminals operate at much lower elevation angles than RKF has assumed, meaning new high-powered terrestrial transmitters will be even more harmful to people using SpaceX's system than RKF's model predicts. If RKF were to include in its analysis other NGSO operators authorized to operate at even lower elevation angles, the results would no doubt be even worse.

Here again, RKF defends its analysis by asserting that it did not have actual elevation data upon which it could rely.³¹ Yet instead of either providing its software for others to reproduce its results using actual data or accepting the information SpaceX has now provided for the record and re-running its analysis, RKF continues to insist that its own guesses are more reliable than SpaceX's actual use data. RKF goes so far as to cite a statement SpaceX made *before* its space station authorization was modified to allow full-time operations at elevation angles as low as 25 degrees—choosing to rely on SpaceX statements that seem to support RKF's analysis and to reject

²⁶ See RKF Report at 23-24.

²⁷ SpaceX Reply Comments at 10.

²⁸ See RKF Response at 11.

²⁹ RKF Report at 24-25.

³⁰ See SpaceX Reply Comments at 9; SpaceX Ex Parte, Attachment at 8.

³¹ See RKF Response at 7.

SpaceX statements that do not.³² This pattern of cherry-picking data severely undermines the credibility of the RKF Report.

Interference metric. SpaceX also pointed out that RKF had chosen an improper interference metric for its analysis. Specifically, SpaceX noted that RKF had used a -8.5 dB I/N criterion taken from a thirty-year-old ITU recommendation regarding interference between the Fixed-Satellite Service (“FSS”) and terrestrial *fixed* service rather than the ITU’s more recent -12.2 dB (i.e., 6% $\Delta T/T$) interference protection criterion for FSS receivers in the presence of International Mobile Telecommunications-Advanced systems of the type proposed by RS Access.³³ Indeed, the Commission has established this 6% $\Delta T/T$ criterion as the trigger for spectrum splitting among NGSO systems, concluding “that this approach is the best method for characterizing the situations in which there is potential for interference between NGSO FSS systems.”³⁴ Yet, demonstrating once again the lack of actual knowledge of NGSOs in its analysis, RKF simply brushes past these rules and instead relies on an outdated, inapplicable, but more favorable metric. Even so, interference at the levels identified by RKF would harm SpaceX’s customers by limiting throughput. For example, interference at -12.2 dB causes a desense (reduced signal-to-noise ratio (“SNR”) of the link) of 0.25 dB. Interference at -8.5 dB causes a desense of 0.57 dB, that is 0.32 dB more than baseline. An SNR reduction of 0.32 dB causes a throughput reduction per downlink beam of about 17.5 Mbps over time. If SpaceX were to provision throughput commensurate with industry standards per user, high-power terrestrial use would prevent service to multiple users *per beam*. That translates to a loss of approximately 30,000 users in the United States at a cost to SpaceX on the order of \$35M per year just for its first-generation constellation.

But this is only the harm RKF’s sponsors would cause to SpaceX. RKF still has not presented any data whatsoever about how terrestrial operations in the 12 GHz band would harm other NGSO operators. Yet even with this critical limitation, RKF’s own analysis demonstrates harms to *at least* tens of thousands of Americans per year. This level of harm certainly exceeds the precondition the Commission set before it would give new rights for RKF’s sponsor to flip.

Reliance on coordination. In a last-ditch effort to wave away the harmful interference to tens of thousands of people that its own analysis demonstrates, RKF claims that good faith coordination between NGSO and terrestrial operators would somehow reduce the probability of interference—even though its sponsors have never suggested they would comply with a coordination requirement.³⁵ In fact, SpaceX has tried repeatedly to coordinate with RKF’s financial backer, who has steadfastly refused to engage. SpaceX has even gone so far as to share data with RS Access based on an agreement that RS Access would also exchange data on its system to facilitate coordination, but SpaceX’s gesture was met with silence from RS Access despite repeated requests for the promised data. Thus, RKF’s reliance on coordination in this situation as an ameliorating factor is contrary to the actions of its own benefactor. Moreover, “coordination”

³² See *id.* & n.29 (quoting a SpaceX blanket license application from February 2019).

³³ See SpaceX Reply Comments at 7-8.

³⁴ *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, 32 FCC Rcd. 7809, ¶ 49 (2017).

³⁵ See RKF Response at 2.

is a misnomer in the situation posited by RKF, as the potential interference is only one way—while RKF’s backers would cause massive interference to satellite users, satellite operations would have no effect on the terrestrial operations. In this scenario, whomever RKF’s backers flipped their spectrum to would have no incentive to offer reasonable terms in a coordination.

Even now, after RKF relies repeatedly on coordination to cure the failings in its report, its sponsors have not proposed rules that would impose a coordination requirement on 12 GHz terrestrial licensees. In fact, neither RKF nor its MVDDS backers offer any example of another case in which a ubiquitously deployed satellite service and a mobile terrestrial service successfully engaged in such coordination. Indeed, although the Commission specifically asked whether there is “any history of successful dynamic spectrum sharing involving widely deployed satellites and ubiquitous terrestrial services,”³⁶ no party identified such a case for the record or argued in the years of lobbying before the NPRM that coordination should successfully be used.

As the Commission has consistently concluded in the past, such coordination is not possible. For example, in considering whether terrestrial mobile systems could be allowed to share spectrum used by mobile satellite systems, the Commission concluded—at the urging of DISH Network, a vocal MVDDS proponent in this proceeding—that “such a sharing scenario generally remains impractical at this time and would inappropriately affect the rights of the existing [satellite] authorization holders.”³⁷ Similarly, the Commission declined to even consider authorizing terrestrial mobile operations in the 40-42 GHz band used for satellite downlinks to user terminals, similar to the 12 GHz band. The Commission determined that “[n]o proponent of mobile use for this band has explained how such use would be consistent with the operation of satellite user devices in this band,” noting that ubiquitous deployment of such user terminals made this band “different from the sharing analysis between UMFUS and individually licensed earth stations because [in that band] the number and location of individually licensed earth stations can be controlled.”³⁸ Indeed, the Commission’s prior analysis of interference in the 12 GHz band from fixed MVDDS systems into ubiquitously deployed NGSO earth stations further illustrates the point. Even though the terrestrial transmitters in that case were fixed (and thus more easily accommodated than a mobile system), the Commission rejected coordination in favor of spacing requirements, concluding that “standard mitigation techniques such as shielding and repositioning of the NGSO FSS antenna may be of little benefit.”³⁹ Accordingly, the Commission should disregard RKF’s invocation of coordination as a panacea for resolving interference issues.

Proposed rules for technical operations. RKF ramps up its rhetoric by falsely accusing SpaceX of an “audacious, goalpost-shifting claim”—namely, that SpaceX pointed out that in this rulemaking the Commission has asked for commenters to propose actual rules.⁴⁰ First, SpaceX’s point was not that RKF was solely responsible for proposing rules, but that no MVDDS commenter

³⁶ NPRM ¶ 46.

³⁷ *Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands*, 27 FCC Rcd. 16102, ¶ 169 (2012).

³⁸ *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services*, 32 FCC Rcd. 10988, ¶ 192 (2017).

³⁹ *Amendment of Parts 2 and 25 of the Commission’s Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range*, 17 FCC Rcd. 9614, ¶ 122 (2002).

⁴⁰ See RKF Response at 11.

proposed any rules in this proceeding. RKF took advantage of the absence of any proposal to craft assumptions that suited its predetermined conclusion, without being tethered to any specific restrictions that future terrestrial licensees would have to observe.

More to the point, the Commission clearly has asked for proposals, but RKF's sponsors just ignored the request. For example, the NPRM states that "we seek comment on whether we should allow two-way communications and flexible use of the band as well as what technical parameters would be appropriate for such new terrestrial operations."⁴¹ It also seeks comment "on the appropriate technical criteria that would be necessary to protect NGSO FSS from harmful interference from higher-power, two-way mobile operations."⁴² Rather than propose such "technical criteria," however, RKF has simply modeled one set of best-case assumptions about how a hypothetical terrestrial mobile network might interact with one NGSO satellite system. It has not proposed any limits to protect NGSO user terminals nor identified any parameters that would be appropriate to prevent harmful interference from terrestrial operations. Instead, it simply implies limits on next-generation satellite users by using those limits as assumptions in its submission. Given that the ultimate objective of any rulemaking proceeding is to determine what, if any, rules should be adopted to achieve a given objective, the lack of an actual proposal effectively prevents the Commission from moving ahead with a further notice in this proceeding.

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As many commenters have demonstrated, the RKF submission suffers from significant flaws in its assumptions and methodology. Rather than correct these flaws, RKF has resorted to digging in its heels in defiance of the mounting evidence. But despite the shaky hopes of RKF and its financial backer, the Commission cannot ignore information in the record, as suggested by RKF, just because it does not support the interests of MVDDS operators. Instead, the Commission should follow the evidence and close this proceeding without jeopardizing the provision of high-quality next-generation satellite broadband services to underserved Americans.

Sincerely,

/s/ David Goldman

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⁴¹ NPRM ¶ 22.

⁴² *Id.* ¶ 30.