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FEDERAL COMMUNICATIONS COMMISSION
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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In re	)	
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Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use	)	IB Docket No. 98-172 RM-9005 RM-9118

To: The Commission

COMMENTS OF KASTAR SATELLITE COMMUNICATIONS CORP., KASTARCOM WORLD SATELLITE, LLC. AND @CONTACT, LLC

KASTAR SATELLITE COMMUNICATIONS CORP.,
KASTARCOM. WORLD SATELLITE, LLC
@CONTACT, LLC

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November 19, 1998

No. of Copies rec'd 0+9
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Summary

KaStar Satellite Communications Corp., KaStarcom. World Satellite, LLC and @Contact, LLC (collectively, the "KaStar Companies") applaud the Commission's efforts to redesignate the 17.7-19.7 GHz band (the "18 GHz band") between Fixed Satellite Services ("FSS") and terrestrial Fixed Services ("FS") and to adopt standards for blanket licensing of FSS earth stations. This rule making proceeding will resolve several technical issues that will facilitate and expedite FSS service to the public.

With the changes proposed in these Comments, the KaStar Companies support adoption of the Commission's proposal to allocate 500 MHz of spectrum in the 18 GHz band for primary and co-primary use for Geostationary Orbit Fixed Satellite Service ("GSO FSS"). In a departure from the Commission's proposed band segmentation plan, the KaStar Companies believe that the designation of the 18.55-18.8 GHz band to GSO FSS on a *primary* basis and the 18.3-18.55 GHz band on at least a *co-primary* basis would better serve the FSS.

The KaStar Companies agree with the Commission's proposal to authorize blanket licensing of GSO FSS and Non-Geostationary Orbit Fixed Satellite Service ("NGSO FSS") earth stations in those frequency bands where GSO FSS and NGSO FSS systems will have primary status. Blanket licensing will permit the rapid development and ubiquitous deployment of FSS earth stations at an affordable price for the public. The KaStar Companies urge the Commission to extend the blanket licensing for GSO FSS systems to the 29.25-29.5 GHz band where GSO FSS and Mobile Satellite Service Feeder Links have co-primary status.

The KaStar Companies agree with the Report filed today by the Blanket Licensing Working Group and its conclusions on the threshold power levels for uplink and downlink operations for

GSO FSS systems. The KaStar Companies recommend adoption of higher threshold power levels for blanket licensing for GSO FSS and NGSO FSS to permit the operation of multiple licensed systems in each service.

Finally, the Commission should defer adoption of sharing standards between GSO FSS and NGSO FSS systems pending final resolution of this matter at the International Telecommunications Union ("ITU"). Otherwise, GSO FSS and NGSO FSS licensees could unnecessarily expend considerable time and money designing systems that would be inconsistent with the ITU's final decision, which would make it difficult for GSO FSS and NGSO FSS licensees to operate on a secondary basis.

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Redesignation of the 17.7-19.7 GHz Frequency	)	
Band, Blanket Licensing of Satellite Earth	)	IB Docket No. 98-172
Stations in the 17.7-20.2 GHz and 27.5-30.0	)	RM-9005
GHz Frequency Bands, and the Allocation of	)	RM-9118
Additional Spectrum in the 17.3-17.8 GHz and	)	
24.75-25.25 GHz Frequency Bands for Broadcast	)	
Satellite-Service Use	)	

To: The Commission

COMMENTS OF KASTAR SATELLITE COMMUNICATIONS CORP., KASTARCOM. WORLD SATELLITE, LLC AND @CONTACT, LLC

KaStar Satellite Communications Corp. ("KaStar"), KaStarcom. World Satellite, LLC ("KaStarcom") and @Contact, LLC (collectively, the "KaStar Companies")[1] hereby submit their Comments in the above-referenced proceeding.[2] As further discussed herein, although the KaStar Companies agree with the Commission's proposal to allocate an additional 500 MHz of spectrum in the 17.7-19.7 GHz band ("18 GHz band") for primary and co-primary use by Geostationary Orbit Fixed Satellite Service ("GSO FSS"), they propose to reverse the primary and co-primary designations. The KaStar Companies also support the Blanket Licensing Report (the "Report")

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[1] KaStar is authorized to construct, launch and operate two Geostationery Orbit Fixed Satellite Service ("GSO FSS") satellites in the Ka-band. *See KaStar Satellite Communications Corp.*, 13 FCC Rcd 1366 (Int. Bur. 1997). KaStarcom has pending an application to construct, launch and operate two GSO FSS satellites in the Ka-band. @Contact has pending an application to construct, launch and operate an NGSO FSS system.

[2] *See Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use*, FCC 98-235 (released September 18, 1998) (the "*NPRM*"). The Commission has extended the deadline for filing comments until November 19, 1998. *See Order*, DA 98-2321 (released November 2, 1998). Thus, these Comments are timely filed.

filed today by the Blanket Licensing Working Group (the "BL-WG"). Further, the KaStar Companies advocate strict standards for secondary operations of FSS or Fixed Services ("FS") and oppose any extension of secondary status for FS to file for additional frequency bands. Finally, the KaStar Companies recommend that the Commission defer consideration of sharing between GSO and Non-Geostationary Orbit Fixed Satellite Service ("NGSO FSS") pending final resolution of this matter at the International Telecommunications Union ("ITU").

Introduction

1. The KaStar Companies are entrepreneurial businesses seeking to establish a competitive global satellite communications system. Among the services they plan to provide to the public are two-way internet, video, multimedia and telemedicine services. Whereas terrestrial and wired services primarily target commercial businesses and high-end users in densely populated areas, FSS systems can provide ubiquitous services to rural and urban locations on an equal basis.

2. The KaStar Companies, as well as other FSS licensees and applicants, have invested considerable financial and human resources to develop new technology to deploy their satellite systems. More than three years ago, KaStar and other FSS licensees filed applications to provide FSS services. They coordinated with the Commission to prepare the necessary filings with the ITU to establish priority status for domestic and international orbital locations, and negotiated with other applicants for more than a year to reach consensus on an orbital assignment plan. The Commission approved that plan and, in May of 1997, issued authorizations to 13 GSO FSS

systems[3] and one NGSO FSS systems.[4] KaStar received authorization to construct, launch and operate Ka-band satellites at 109.2° W.L. and 73° W.L.,[5] locations that can provide full coverage of the continental United States and most of South America.[6]

3. Since KaStar received its authorization, the FSS licensees have worked diligently to resolve the remaining technical issues necessary for the launch of their respective systems. For 18 months, they have jointly discussed standards for blanket licensing of FSS earth stations and for specified spectrum for inter-satellite links. During this time, KaStar and other FSS licensees have committed a considerable amount of time, money and resources designing their satellite systems and contracting with satellite manufacturers and strategic partners to fund, construct and launch their satellites.

4. KaStarcom and @Contact also have invested considerable resources to design and develop new satellite services. On December 22, 1997, KaStarcom and 12 other applicants filed applications for new GSO FSS systems in the Ka-band. On the same date, @Contact and three other companies filed applications for NGSO FSS systems in the Ka-band. During the past year,

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[3] *See KaStar Satellite Communications Corp.*, 13 FCC Rcd 1366 (Int. Bur. 1997); *EchoStar Satellite Corporation*, 13 FCC Rcd 5664 (Int. Bur. 1997); *VisionStar, Inc.*, 13 FCC Rcd 1428 (Int. Bur. 1997); *Orion Atlantic, L.P.*, 13 FCC Rcd 1416 (Int. Bur. 1997); *PanAmSat Licensee Corp.* 13 FCC Rcd 1405 (Int. Bur. 1997); *NetSat 28 Company, L.L.C.*, 13 FCC Rcd 1392 (Int. Bur. 1997); *Loral Space & Communications Ltd.*, 13 FCC Rcd 1379 (Int. Bur. 1997); *Hughes Communications Galaxy, Inc.*, 13 FCC Rcd 1351 (Int. Bur. 1997); *Orion Network Systems, Inc.*, 12 FCC Rcd 23027 (Int. Bur. 1997); *Lockheed Martin Corporation*, 12 FCC Rcd 23014 (Int. Bur. 1997); *Comm, Inc.*, 12 FCC Rcd 23001 (Int. Bur. 1997); *GE American Communications, Inc.*, 12 FCC Rcd 6475 (Int. Bur. 1997); and *Morning Star Satellite Company, L.L.C.*, 12 FCC Rcd 6039 (Int. Bur. 1997).

[4] *See Teledesic Corporation*, 12 FCC Rcd 3154 (Int. Bur. 1997).

[5] *See KaStar Satellite Communications Corp.*, 13 FCC Rcd 1366 (Int. Bur. 1997).

[6] KaStarcom has filed for orbital locations at 52° E.L. and 175° W.L. Combined with KaStar's orbital slots, the four locations will enable KaStar and KaStarcom to cover the vast majority of the earth's population.

these applicants have worked with the Commission to prepare the necessary filings with the ITU to establish priority status for domestic and international orbit locations. Currently, the GSO FSS applicants are negotiating an orbital assignment plan.

5. The KaStar Companies commend the Commission for recognizing the need to segment the 18 GHz band. The importance of achieving a favorable resolution of the issues in this proceeding cannot be understated. Designation of appropriate spectrum goes to the very heart of the KaStar Companies' ability to design their satellite systems, attract financing and offer competitive services to the public at reasonable cost. As will be demonstrated herein, making the appropriate regulatory decisions in this proceeding will enable the KaStar Companies to enter the satellite communications industry with certainty and on terms conducive to offering the public a choice. The KaStar Parties urge the Commission to move expeditiously to review the pleadings in this proceeding and achieve a result that will best serve the interests of the public, facilitate the development of new satellite-delivered services around the world and permit existing FS services to continue operating with minimal disruption.

I. DESIGNATION OF AN ADDITIONAL 500 MHz OF SPECTRUM FOR PRIMARY GSO FSS USE WOULD BEST SERVE THE PUBLIC INTEREST.

6. Favorable resolution of technical and spectrum usage issues will greatly assist the initiation of satellite services to the public. The regulatory uncertainty associated with use of spectrum and blanket licensing creates difficulties in developing credible business plans, impedes system design efforts and makes it more difficult to attract strategic partners on reasonable terms. By redesignating the 18 GHz band to make more primary spectrum available to FSS, the

substantial benefits of blanket licensing of earth stations could be realized. Blanket licensing would permit manufacturers to mass produce FSS earth stations, thereby reducing their costs. This savings would allow FSS systems to make their costs more certain which would, in turn, instill confidence in potential strategic partners both in terms of removing regulatory questions and reducing equipment costs. Consequently, financing would be available on more favorable terms and the savings on the costs of FSS earth stations would be passed on to the public. Blanket licensing also would eliminate the need to coordinate the earth stations with other receivers, thereby making installation easy for the public. These two factors – affordability and convenience – are why the designation of appropriate spectrum and blanket licensing are imperative for the successful operation of FSS systems.

7. In order to be effective, blanket licensing requires equal amounts of spectrum for uplink and downlink operations. The present band plan allots GSO FSS 1000 MHz of spectrum each for uplink and downlink operations.[7] However, whereas GSO FSS now may use 750 MHz of spectrum on a primary basis for uplink operations (and therefore suitable for blanket licensing), only 500 MHz of spectrum is available on a primary basis for downlink operations. The remaining 500 MHz is available from 17.7-18.8 GHz but is shared on a co-primary basis with FS.

[7] The band plan allocates the 1000 MHz for downlink operations as follows: (1) 500 MHz for GSO FSS use on a primary basis in the 19.7-20.2 GHz band; and (2) 500 MHz in the17.7-18.8 GHz band for GSO FSS use on a co-primary basis with FS.

A. The 18.3-18.8 GHz Portion Of The 18 GHz Band Should Be Redesignated For Primary And Co-primary GSO FSS Use.

8. Two years ago, the Commission adopted rules requiring FSS and FS systems to share the 18 GHz band.[8] Now, in the *NPRM*, the Commission proposes to segment the spectrum as follows:[9]

FS	GSO/FSS	GSO/FSS and FS	NGSO/FSS	MSS/FL and FS	GSO/FSS
gso/fss and ngso/fss	fs and ngso/fss	ngso/fss	fs and gso/fss	gso/fss	ngso/fss
600 MHz	250 MHz	250 MHz	500 MHz	400 MHz	500 MHz

17.7 18.3 18.55 18.8 19.3 19.7 20.2 GHz

9. The KaStar Companies agree with the Commission that segmenting the 18 GHz band between FSS and FS systems is the only viable option that will permit both services to operate efficiently in the 18 GHz band.[10] The present operation of FS systems in urban areas places would make it extremely difficult for FSS systems to coordinate with existing FS systems resulting in indefinite delays or, worse yet, the inability to utilize the spectrum in any meaningful way.

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[9] *See NPRM* at ¶29.

[10] *See See 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 Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, 11 FCC Rcd 19005, 19036 (1996) ("*28 GHz First Report and Order*").

Similarly, the ubiquitous deployment of FSS earth stations would make it increasingly difficult for FS systems to license new stations in the same portion of the 18 GHz band. Band segmentation seems the only practical solution.

10. Further, the KaStar Companies agree that allocation of 500 MHz of contiguous primary spectrum to GSO FSS, combined with the 500 MHz of spectrum from 19.7-20.2 GHz, will give GSO FSS systems the required 1000 MHz for downlink operations to accommodate the 1000 MHz for uplink operations.[11] However, the KaStar Companies urge the Commission to modify its plan and segment the 18 GHz band as follows:

- Designate 250 MHz from 18.3-18.55 GHz for GSO FSS and FS use on a *co-primary* basis;
- Designate 250 MHz from 18.55-18.8 GHz for GSO FSS use on a *primary* basis;
- Revise the sharing standards between government and non-government operations in the 18.6-18.8 GHz band consistent with the international standards; and
- Relocate FS stations operating in the 18.55-18.8 GHz band.

11. Both FS and FSS services would benefit from designating the spectrum from 18.3-18.55 GHz for GSO FSS and FS use on a *co-primary* basis. First, based on its participation in meetings involving FSS and FS interests and its analysis of the relevant issues, the KaStar Companies believe that designating 250 MHz for GSO FSS on a primary basis from 18.3-18.55 GHz would be unworkable for both FSS and FS. GSO FSS would have great difficulty blanket licensing earth stations in this band because of the need to coordinate with existing cable television

[11] *See 28 GHz First Report and Order* at 19036 (flexibility afforded by 1.1 GHz of spectrum should provide sufficient downlink capacity to correspond with the 1000 MHz of uplink spectrum designated for GSO/FSS).

relay service ("CARS") stations that operate on a widespread basis in urban areas. By the same token, if CARS were redesignated as a secondary service, applicants and existing licensees that desired to add programming distribution paths or modify existing facilities could face great difficulty in so doing in light of the need to coordinate with primary FSS systems. In effect, CARS stations could be locked in to their current parameters and would be restricted in their ability to improve service to the public by upgrading their facilities.

12. Second, because only FS stations presently are licensed from 18.3-18.55 GHz, FS systems could continue to operate in this frequency band without disruption to their existing service. As co-primary spectrum, applicants would not be precluded from filing applications for new stations so long as they coordinated with existing stations. Although the need to coordinate may place some restrictions on both services, it is not an absolute barrier to the licensing of new stations.

13. Third, the proposal also would protect the existing CARS stations operating within 18.3-18.55 GHz. Presently, CARS stations are authorized to operate in the 18.142-18.58 GHz band. The *NPRM* proposes to give GSO FSS systems primary status from 18.3-18.55 GHz and FS systems (including CARS stations) secondary status. The Commission's plan could restrict the operations of CARS stations from 18.3-18.55 GHz. However, co-primary status for both services would permit the continued operation of existing CARS stations.

14. The KaStar Companies also request redesignation of the spectrum from 18.55-18.8 GHz as *primary* for GSO FSS system. By so designating, the Commission also could authorize blanket licensing of GSO FSS earth stations, so long as certain conditions are met. First, the Commission must revise the strict technical standards for sharing between government and non-

government stations in the 18.6-18.8 GHz band imposed on domestic licensees and adopt the more flexible international sharing standards. Second, the Commission must redesignate FS in the 18.55-18.8 GHz band to other frequency bands.

15. Presently, Earth Exploration Satellite ("EES") and Space Research ("SR") are licensed to operate from 18.6-18.8 GHz. The technical constraints imposed on the operation of non-government systems in the 18.6-18.8 GHz band would not permit blanket licensing of GSO FSS earth stations. However, the domestic technical standards for this band are significantly more stringent than the ITU's standards for power flux density levels of -115 dBW/m^2/MHZ. The KaStar Companies believe that if EES and SR were brought into conformance with the ITU's standards, this would improve the operating standards for GSO FSS earth stations in this band sufficiently enough to permit blanket licensing for the ubiquitous deployment of earth stations.

16. Designation of the 18.55-18.8 GHz band as primary for FSS means that there would be some disruption of existing service. In order for this segment to be truly "primary," the Commission should require CARS stations to migrate from the 30 MHz in the 18.55-18.58 GHz band in order to permit blanket licensing of GSO FSS systems throughout the 18.5-18.8 GHz band. The continued operation of CARS from 18.55-18.58 GHz would prevent the blanket licensing of GSO FSS earth stations in 125 MHz of that spectrum (18.55-18.68 GHz), thereby defeating the entire purpose of redesignation. To operate efficiently, GSO FSS systems must operate in segments of 125 MHz. In this manner, allocating the 500 MHz of spectrum for GSO FSS systems on a contiguous basis promotes greater spectrum efficiency. Because CARS stations are principally located in urban areas, the continued use of only 30 MHz of spectrum effectively would prevent the blanket licensing of GSO FSS systems for 125 MHz of spectrum.

17. Displacing users of this relatively small amount of spectrum would appear to be the least disruptive means to achieve the broader objectives the Commission seeks in this proceeding. In fact, there is alternative spectrum that could be made available so that CARS could reclaim this 30 MHz. The Commission could redesignate the spectrum allocation for CARS from 18.142-18.58 GHz to 18.112-18.55 GHz, capturing the 30 MHz in the process. Or, the Commission could consider the relocation of the CARS stations (or at least the 30 MHz from 18.55-18.58 GHz) from the 18 GHz band to another frequency band.

18. Further, the Commission should redesignate the FS operating from 18.6-18.82 GHz to the 17.8-18.3 GHz band, where the *NPRM* proposes to give FS primary status. The redesignation would facilitate the blanket licensing of GSO FSS within 18.55-18.8 GHz by eliminating the requirement to coordinate with existing FS stations, and would also permit the continued growth of FS by eliminating their secondary status in this band. Retaining FS in the 18.55-18.8 GHz band with FS on a secondary status will make it difficult for FS to continue expand services. It would be far easier for the FS to coordinate with the existing FS in the 17.8-18.3 GHz band than with GSO FSS.

19. In sum, the KaStar Companies believe that this band segmentation plan strikes the appropriate balance between the needs of FSS systems to access spectrum and permit necessary blanket licensing of earth stations and the needs of FS systems to minimize disruption in existing service and provide for future expansion. The KaStar Companies thus request adoption of rules incorporating the proposals discussed above.

B. Restrictions On The Spectrum Available For GSO FSS Would Not Serve The Public Interest.

20. The *NPRM* seeks comment on several alternative proposals that potentially could restrict the ability of GSO FSS to operate in the 18 GHz band. The KaStar Companies believe that to the extent these proposals prevent blanket licensing or limit the flexibility of GSO FSS licensees to provide new and innovative services, these proposals are contrary to the public interest.

21. First, the Commission's proposal to require sharing between GSO FSS and FS from 18.3-18.4 GHz would not provide the necessary amount of spectrum for FSS.[12] Presently, GSO FSS have authorization for 1000 MHz of spectrum for uplink operations, of which 750 MHz is allocated to GSO FSS on a primary basis and therefore eligible for blanket licensing. GSO FSS requires at least the same amount of spectrum for downlink operations for blanket licensing. The Commission's proposal provides GSO FSS with only 650 MHz of spectrum for blanket licensing, far short of the necessary minimum of 750 MHz.

22. Second, the Commission should not permit secondary operations in the 18 GHz band other than those already authorized in the present band plan.[13] The band plan proposed in the *NPRM* does not provide either FSS or FS with optimal spectrum and requires sharing between FSS and FS in several instances. Permitting additional services to operate on a secondary basis in the 18 GHz band would increase the likelihood of coordination and interference problems, and would unnecessarily require those services with priority to expend considerable financial resources and

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[12] *See NPRM* at ¶ 35.

[13] The *NPRM* references secondary operations in the 19.7-20.2 GHz band. *See NPRM* at ¶34. This band is not available for FS and should not be allocated to FS on a secondary basis. As a practical matter, it does not appear that FS and NGSO FSS could share this band together on a secondary basis. More importantly, the additional congestion in this band, even on a secondary basis, could restrict the operations of GSO FSS on a primary basis.

time either opposing such applications or resolving interference problems after the secondary station commences operation. It does not make sense to exacerbate an already complex situation by including additional services.

23. Third, the KaStar Companies do not believe that designating the entire 18 GHz band[14] or even the 17.7-18.8 GHz band as co-primary accomplishes any public interest objectives.[15] As discussed elsewhere in these Comments, blanket licensing of FSS earth stations is necessary for the rapid development and deployment of FSS systems to the public at an affordable price. Requiring coordination for all earth stations throughout the entire 18 GHz band would be an administrative nightmare resulting in substantial service initiation delays and higher costs. In addition, the use of larger gateway stations in lieu of such coordination would add to the time and cost of implementing FSS systems, and would not be a reasonable alternative for the ubiquitous deployment of FSS services. The inconvenience and increased cost for earth stations would make it difficult for the public, especially the residential user, to take advantage of this new service.

24. In response to the Commission's inquiry concerning the potential standardization of 18 GHz designations on an international basis,[16] the KaStar Companies believe that such uniformity would be advantageous. Logically, it would be more efficient for FSS operators to design their satellite systems on a global basis if each satellite operates with the same band plan and blanket licensing standards. To the extent the Commission can facilitate this process by

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[14] *See NPRM* at ¶38.

[15] *See NPRM* at ¶36.

[16] *See NPRM* at ¶39.

requiring United States licensees to adhere to the 18 GHz band plan ultimately adopted in this proceeding internationally as well as domestically, the KaStar Companies urge the Commission to adopt this proposal.

II. THE COMMISSION SHOULD AUTHORIZE BLANKET LICENSING FOR FSS EARTH STATIONS.

A. Blanket Licensing For GSO FSS Will Facilitate And Expedite The Provision Of New Services To The Public.

25. The KaStar Companies support the Report filed today by the BL-WG as a well-reasoned approach for the blanket licensing of GSO FSS earth stations domestically and internationally. The Report reflects the diligent efforts of the GSO FSS licensees during the past 18 months to reach consensus on standards for blanket licensing. The Report recommends uniform technical parameters for blanket licensing, thereby permitting the mass deployment of small earth stations without prior coordination. The Report would not prohibit deployment of earth stations proposing to operate in excess of the technical parameters, but would instead require coordination between such GSO FSS systems and neighboring satellites. In this manner, the Report provides the GSO FSS licensees with necessary flexibility in designing their systems.

26. The KaStar Companies support the Report's recommendations for threshold power levels for uplink and downlink operations for small earth stations in a 2° orbital spacing environment. The Report correctly states that the BL-WG participants (including KaStar) agree that the maximum downlink power flux density should range from -118 dBW/m^2/MHZ for narrow-band carriers and -120 dBW/m^2/MHZ for wide-band carriers. The Report also correctly

states that a majority of the BL-WG (including KaStar) agrees that the maximum uplink EIRP spectral density limits under clear sky conditions should be 25 dBW/MHZ.

27. The KaStar Companies understand that the European community agrees that the proposed threshold power level for uplink operation of 25 dB is correct and are proposing adoption of 25 dB as the maximum power level for Europe. These proposed standards, although not binding on the United States, provide additional support for adoption of the proposed power levels contained in the Report. First, the European community independently reached consensus on the same power level for uplink operations as the BL-WG. This further confirms that the Report's power level recommendations are valid. Second, GSO FSS systems proposing to operate internationally would be at a significant disadvantage if they were to operate with power levels below those proposed internationally. For example, if the Commission were to adopt a power threshold level of 21 dB for uplink operations but Europe adopted a standard of 25 dB, the United States GSO FSS licensees could receive severe interference to their systems operating in Europe.

28. The Commission should apply the blanket licensing standards not just domestically, but also internationally in all situations where 2° orbital spacing exists between United States licensees, regardless of the orbit location or the territory served. Otherwise, GSO FSS licensees could receive interference from neighboring United States satellites in the international portion of the arc. By adopting the blanket licensing standards internationally, GSO FSS systems will have the necessary certainty to design their satellite systems for global and international use.

29. The Report provides GSO FSS licensees with flexibility in designing their systems while providing protection from interference from neighboring satellite systems. The power levels provide GSO FSS licensees with the necessary certainty that designing their systems within certain

technical parameters will not result in the reception of harmful interference from neighboring satellites. The Report provides flexibility for various GSO FSS systems because the recommended power levels are not power *limits* but *threshold levels*. A satellite licensee may design and operate a satellite system that exceeds the threshold level, provided the licensee coordinates its earth stations with adjacent satellites prior to commencing operation. In this manner, the present and future needs of the public can be accommodated and GSO FSS licensees can provide a wide range of services.

B. The Commission Should Adopt Blanket Licensing Standards For NGSO FSS That Permit Licensing Of Multiple Systems.

30. The Commission should authorize blanket licensing of NGSO FSS stations in those frequency bands where NGSO FSS has primary status. NGSO FSS systems would enjoy the same benefits as GSO FSS systems would with blanket licensing, such as the rapid deployment of earth stations to the public in an affordable and convenient manner.

31. There is one significant difference between GSO FSS and NGSO FSS systems. Presently, there is only one licensed NGSO FSS system whereas there are 13 authorized GSO FSS systems. The GSO FSS systems have met on a regular basis for the past 18 months in an effort to establish blanket licensing standards. Although the BL-WG has made enormous progress as reflected in the Report to the Commission filed today, significant work remains ahead. The NGSO FSS systems have not undertaken any such efforts because presently there is only one licensee. However, there are four applicants for the second round, including @Contact. The Commission must ensure that any blanket licensing standards adopted for NGSO FSS are sufficiently flexible

to permit the licensing of additional NGSO FSS systems. The Commission should designate a working group to establish standards for blanket licensing for NGSO FSS systems similar to the BL-WG and ask the group to submit a study to the Commission on blanket licensing standards by a certain date.

32. The Commission should apply the blanket licensing standards for uplink operations in the 29.25-29.5 GHz band where GSO FSS and Mobile Satellite Service Feeder Links ("MSS Feeder Links") have co-primary status. The KaStar Companies believe that successful coordination between GSO FSS earth stations and MSS Feeder Link is possible to permit blanket licensing. Presumably the licensee of MSS Feeder Links will operate with a limited number of stations in a handful of urban areas. This reduces significantly the necessary area to coordinate between GSO FSS earth station and MSS Feeder Links. The KaStar Companies believe that it is possible to protect these stations and still be able to blanket license in this frequency band.

III. THE COMMISSION SHOULD DEFER CONSIDERATION OF SHARING STANDARDS BETWEEN GSO FSS AND NGSO FSS SYSTEMS.

33. The Commission should defer consideration of sharing standards between GSO FSS and NGSO FSS systems until the ITU has completed its proceeding on this matter. Presently, the ITU is considering a proposal to adopt sharing standards between GSO FSS and NGSO FSS systems. If the Commission were to adopt standards that were inconsistent with the ITU's new standards prior to completion of that process, GSO FSS and NGSO FSS systems could suffer irreparable harm. These systems could expend considerable resources in time and money in designing and constructing their systems only to have to redesign their systems later to conform

to the ITU's standards. The lost investment and lost time would have an adverse impact on the ability of FS licensees to construct and operate their systems. The public interest is better served by deferring consideration on these matters until after the ITU completes its proceeding.

34. If the Commission decides to proceed with adopting sharing standards, the Commission should establish a working group to develop these standards. The working group should be comprised of GSO FSS and NGSO FSS licensees and would provide its recommendations to the Commission by a certain date. In this manner, the Commission would have the benefit of a complete report and consensus on sharing standards.

Conclusion

This KaStar Companies support the objectives sought in this rule making proceeding to resolve the remaining technical and regulatory issues in the 18 and 28 GHz bands. With the changes proposed in these Comments, the Commission should segment the 18 GHz band and provide GSO FSS systems with blanket licensing authority in the 18 and 28 GHz bands where FSS would have primary status. The Commission should encourage the BL-WG to complete its work on blanket licensing, and establish industry working groups to determine blanket licensing standards for NGSO FSS and for sharing between GSO FSS and NGSO FSS systems.

The KaStar Companies encourage the Commission to proceed with due speed on these important matters. The FSS community needs resolution in order to complete the design of its systems, obtain any necessary financing and provide a new generation of competitive services to the public.

Respectfully submitted,

KASTAR SATELLITE COMMUNICATIONS CORP.
KASTARCOM. WORLD SATELLITE, LLC
@CONTACT, LLC

By: _____

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November 19, 1998