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

In the Matter of	)	
	)	
Issues Related to Allegations of Warehousing and Vertical Foreclosure in the Satellite Space Segment	)))	IB Docket No. 13-147

COMMENTS OF ECHOSTAR AND HUGHES

ECHOSTAR SATELLITE OPERATING CORPORATION
HUGHES NETWORK SERVICES, LLC

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EchoStar Satellite Operating Corporation and its wholly owned subsidiary Hughes Network Services, LLC ("Hughes") (collectively, "EchoStar") submit these comments in response to the Federal Communications Commission's notice of inquiry in this proceeding.[1]

INTRODUCTION

EchoStar shares with the Commission the goals of this proceeding. EchoStar deeply believes that spectrum and orbital slots should be used efficiently, which improves industry's ability to provide innovative and cost-efficient communication services across the globe. But EchoStar believes that this proceeding, as currently configured, is not well designed to achieve those laudable goals. More pointedly, the proposals reflected in this proceeding would, if adopted, be likely to cause both spectrum and orbital resources to be used less efficiently – to the detriment of consumers and to the detriment of U.S. industry.

The *NOI*'s warehousing proposals, for example, impose extraordinary burdens that would be unmanageable if applied to licensees in other competitive telecommunications markets. They

[1] See Issues Related to Allegations of Warehousing and Vertical Foreclosure in the Satellite Space Segment, Notice of Inquiry, 28 FCC Rcd 8571 (2013) ("NOI").

would forestall innovation, calling into question the ability of the satellite industry to raise the substantial investment required to deploy its assets and provide services to consumers.

The satellite sector is today a robustly competitive industry offering consumers a plethora of innovative and cost-effective services, particularly in rural areas. This is due in no small measure to the pro-competitive satellite regulations that the Commission began to adopt in the 1990s. The flaw in this proceeding is that the Commission seems not to have recognized its own success. The proposals implicitly assume a non-competitive industry where the lack of market forces would permit conduct like the "warehousing" of orbital slots. That industry no longer exists. Over the past 20 years, the satellite sector has dramatically changed from an industry with limited competition and services to one characterized by rigorous competition among numerous service providers that offer consumers a diverse array of innovative services on a cost-effective basis. In addition, as a result of the technical evolution of both satellite and terrestrial services, the satellite industry now also faces intermodal competition from a wide variety of terrestrial mobile and fixed service providers. This has forced satellite service providers to be even more innovative and cost-conscious. At the same time, both the Commission and the ITU have adopted rules that are more than sufficient to address potential warehousing issues and have successfully done so.[2] Today, for example, because of this success, many foreign countries have adopted similar requirements to protect against anti-competitive behavior and warehousing.

In addition, to meet the relentless consumer demand for more bandwidth and to stay competitive, satellite operators have had to implement techniques to extend the useful life of

[2] For example, the Commission adopted requirements regarding milestones, bonds, and limits on the number of licensed but unbuilt locations in order to prevent satellite speculation and warehousing. *See Amendment of the Commission's Space Station Licensing Rules and Policies,* First Report and Order and Further Notice of Proposed Rulemaking in IB Docket No. 02-34, and First Report and Order in IB Docket No. 02-54, 18 FCC Rcd 10760, ¶¶ 167, 175, 230 (2003) ("*Satellite Licensing First Report and Order*"). Additionally, the ITU Radio Regulations provide for bringing-into-use requirements. *See* ITU Radio Regulations, No. 11.44.

existing facilities while simultaneously deploying new facilities (*e.g.*, space stations and associated ground infrastructure). Competitive pressures have also driven the improvement of satellite infrastructure technologies. Operators have deployed facilities that can operate over a longer life span and that can adapt to provide new services while on station (*i.e.*, while whirling around the globe 23,000 miles up).[3] Satellites thus have longer and more productive lives than they had 20 years ago, and even older satellites with reduced capacity can provide services to niche markets, ensure the availability of critical back-up capacity, and allow quick entry into new markets.

The bottom line is that satellite communication services are more competitive, more innovative, more diverse, and more desired by consumers than ever before. And, particularly for those living in rural areas, this is about more than just having additional choices. For those Americans, it is about finally having access to the same kinds of services available to the rest of the country.

Despite the success of satellite services in the market and the ability of the FCC's and the ITU's rules to safeguard against warehousing, the Commission seems to be considering in this proceeding actions that could reduce the amount of spectrum available to satellite operators and limit operators' flexibility to use their existing facilities to serve existing markets or enter new markets. These proposals, if adopted, also would give competitive advantages in new foreign markets to non-U.S. satellite operators – to the detriment of U.S. industry and U.S. workers. This is, of course, not what the Commission intends. Further, if some of the proposals being considered are adopted, they may undermine the ability of satellite operators to invest in new

[3] For example, most satellites today are fashioned as "bent pipes," meaning that signals sent to the satellite are transmitted back down to Earth with no complex signal processing on board the satellite.

facilities and to provide innovative services to consumers. This proceeding thus should be quickly terminated – or, at least, the proposals advanced so far should be taken off the table.

EchoStar does not mean to suggest that the Commission should take no action to ensure that satellite spectrum and orbital resources are used more effectively. The FCC should continue to update its rules governing satellite fleet management to take into account the competitive nature of the industry and advances in technology.[4] The Commission has wisely provided regular updates, for example, to the terrestrial wireless service rules so that they are more attuned to competitive market conditions.[5] It also adopted an Order earlier this month that will be helpful to the satellite industry and the consumers who rely on it.[6] Accordingly, the FCC should now focus on updating its fleet management rules to reflect the competitive nature of the satellite

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[4] *See, e.g., Streamlining the Commission's Rules and Regulations for Satellite Application and Licensing Procedures*, Report and Order, 11 FCC Rcd 21581 (1996) (streamlining licensing procedures and requirements for space and earth stations, but failing to adopt a streamlined procedure for modifications of space station licenses for fleet management purposes); *Amendment of the Commission's Space Station Licensing Rules and Policies*, Second Report and Order in IB Docket No. 02-34, Second Report and Order in IB Docket No. 00-248, and Declaratory Order in IB Docket No. 96-111, 18 FCC Rcd 12507 (2003) ("*Satellite Fleet Management Order*") (adopting and revising various fleet management rules, including Section 25.118(e), for geostationary satellite orbit space stations, but failing to apply these rules to DBS and DARS); *Amendment of the Commission's Space Station Licensing Rules and Policies*, Fourth Report and Order, 19 FCC Rcd 7419 (2004) (extending fleet management modification procedures to DBS and DARS, but not to non-geostationary satellites); *Comprehensive Review of Licensing and Operating Rules for Satellite Services*, Report and Order, FCC 13-111 (2013) ("*Satellite Reform Order*") (allowing re-positioning of non-geostationary satellites without prior FCC approval).

[5] See, e.g., Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission's Rules to Improve Wireless Coverage Through the Use of Signal Boosters, Report and Order, 28 FCC Rcd 1663 (2013) (adopting rules to enhance terrestrial wireless coverage by broadening availability of signal boosters); Amendment of Part 101 of the Commission's Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast Auxiliary Service and Operational Fixed Microwave Licensees, 27 FCC Rcd 9735 (2012) (adopting measures to remove regulatory barriers, lower costs, and increase flexibility for wireless microwave backhaul facilities); Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, Third Order on Reconsideration and Sixth Memorandum Opinion and Order and Fourth Memorandum Opinion and Order and Second Further Notice of Proposed Rulemaking and Declaratory Ruling, 23 FCC Rcd 5992 (2008) (continuing FCC's efforts to transform its rules governing BRS and EBS, including refining technical rules to enable licensees to deploy innovative wireless services in the 2.5 GHz band)

[6] See Satellite Reform Order ¶ 1.

industry and current technology, and consider ways to increase the amount of spectrum available to satellite operators. This will enable satellite providers to support additional consumers for critical broadband and other services across the United States.[7]

BACKGROUND

A. EchoStar Is A Leading U.S. Satellite Operator With A History Of Offering New Services And Technologies

EchoStar is a diverse, dynamic U.S. company. Founded by Charlie Ergen in 1980, EchoStar is a home-grown U.S. satellite operator, services provider and technology company. Today EchoStar owns, leases, or operates a fleet of 22 satellites in the Broadcasting-Satellite Service, the Mobile-Satellite Service ("MSS") and the Fixed-Satellite Service ("FSS") frequency bands to provide innovative, multi-channel video programming distribution through DISH, and state-of-the-art fixed and mobile broadband services, among other services. EchoStar is also a leading satellite technology and services company, and employs more than 2,000 engineers focused on creating hardware and service solutions for cable, telecommunications, IPTV, and satellite companies worldwide.

Hughes is an integral part of EchoStar and is the global leader in providing broadband satellite networks and services for enterprises, governments, small businesses, and consumers. Having pioneered the deployment of very small aperture terminal ("VSAT") services, Hughes remains the world's leading provider of enterprise VSAT services, and has built on this expertise to bring high-speed satellite broadband service to consumers and small businesses across the United States. This broadband business is expanding with the recently launched EchoStar XVII satellite, a next-generation, Ka-band, high-throughput satellite that delivers high-speed Internet access. This high-speed broadband service is especially important to EchoStar's U.S. residential

[7] *See* Daniel Longfield, Frost and Sullivan, *Global Transponder Market*, at 42 (May 2012).

and small business customers living or working in rural communities or in markets with limited terrestrial broadband build-out. Further, these services are invaluable during emergencies when the terrestrial infrastructure may be rendered inoperative or otherwise unavailable for service.

B. The U.S. Satellite Communications Industry Is Competitive

Today, the U.S. satellite communications industry is robustly competitive, with numerous U.S. and non-U.S. satellite operators fiercely competing against each other and against alternative platforms (*e.g.*, terrestrial wireless, coaxial cable, and fiber) to provide consumers with a diverse array of new and innovative services.[8] For example, multiple facilities-based and non-facilities-based FSS providers offer a variety of competing services to U.S. consumers.[9] These service providers utilize the FSS frequency bands to provide a plethora of services including broadband, direct-to-home, data, voice and video services, communications services to vessels and aircraft, enterprise services, communications infrastructure and managed networks, and backhaul communications services. In fact, FSS providers offer consumers the most diverse range of services typically using much less spectrum than terrestrial wireless providers. Their ability to utilize limited spectrum for a continually expanding array of services further demonstrates the competitive nature of the industry. Indeed, the Commission's existing rules and procedures for assigning satellite spectrum were adopted precisely to allow the development

[8] See, e.g., Third Report and Analysis of Competitive Market Conditions with Respect to Domestic and International Satellite Communications Services, Third Report, 26 FCC Rcd 17284, ¶¶ 36-78 (2011) ("Third Satellite Competition Report") (discussing the operations and service offerings of various FSS, MSS, and DARS operators); Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Fourteenth Report, 27 FCC Rcd 8610, ¶¶ 18, 31, 118-25 (2012) (discussing the operations and service offerings of DBS operators).

[9] Facilities-based FSS providers serving the United States include Intelsat, SES, Eutelsat, Telesat, Satmex, EchoStar, DIRECTV, O3B, and Viasat. *See Third Satellite Competition Report*, ¶¶ 8, 37-38. Non-facilities-based FSS providers serving the United States include CapRock, Globecomm, Artel, and Segovia. *See id.* ¶ 42.

so as to accommodate multiple competitors and ensure opportunities for competitive market entry.[10]

ARGUMENT

I. OPERATIONAL FLEXIBILITY IS CONSISTENT WITH TELECOMMUNICATIONS INDUSTRY PRACTICES

The *NOI* seeks to explore various measures that would prohibit or limit gaps in service, use of older replacement satellites, license term extensions, and use of underutilized satellites. These measures, however, would restrict the longstanding operational flexibility that the FCC has afforded to satellite licensees.

As the FCC has found for terrestrial wireless services,[11] operational flexibility is critical to spur innovation and competition. Satellite services are no different in requiring operational flexibility. Building and launching a satellite require significant time and upfront costs ranging upwards of half a billion dollars per satellite.[12] In view of the substantial investment of time and capital required to launch a commercial satellite service, the Commission has established a replacement expectancy policy that provides some assurance that satellite operators will be able to continue to offer service from the same orbital location as older satellites are retired and

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[10] See Satellite Licensing First Report and Order ¶¶ 23-29, 74-79.

[11] *See, e.g., Service Rules for Advanced Wireless Services H Block*, Report and Order, 28 FCC Rcd 9483, ¶¶ 1, 4, 9 (2013) (adopting flexible-use service rules for H block operations to enable a wide variety of high-bandwidth terrestrial wireless applications); *Amendment of the Commission's Rules to Permit Flexible Service Offerings in the Commercial Mobile Radio Services*, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8965 (1996) (allowing commercial wireless providers to provide fixed wireless services on a co-primary basis with mobile services); *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 14165, ¶ 1 (2004) (restructuring BRS/EBS band plan to provide "greatly enhanced flexibility in order to encourage the highest and best use of spectrum … and the growth and rapid deployment of innovative and efficient communications technologies and services").

[12] See Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, Memorandum Opinion and Order, 3 FCC Rcd 6972, 6976 n.31 (1988) ("1988 Assignment Order"); Satellite Licensing First Report and Order ¶ 220.

replaced.[13] As the Commission has noted, "without this assurance, operators may be discouraged from investing the hundreds of millions of dollars needed to construct, launch, and operate each satellite."[14] The Commission also consistently has allowed satellite operators reasonable flexibility "to rearrange satellites in their fleet to reflect business and customer considerations"[15] and the greater flexibility "to offer whatever services they decide will best meet their customers' needs."[16]

II. THE AGE OF A SATELLITE IS NOT A SIGNIFICANT DETERMINING FACTOR IN ITS USABILITY

The *NOI* proposes to restrict use of older, in-orbit satellites as replacement satellites by, for example, imposing limits based upon the age or health of the satellite and precluding older replacement satellites from operating in inclined orbit.[17] The *NOI* incorrectly presumes that new satellites better serve a customer's needs than older ones.[18] In fact, satellite operators routinely maintain and operate fleets consisting of a mix of new, state-of-the-art and older satellites. Just as airlines require flexibility to deploy new planes to support high-demand routes and older

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[13] *See 1988 Assignment Order*, at 6976 n.31; *Amendment of the Commission's Space Station Licensing Rules and Policies*, First Order on Reconsideration and Fifth Report and Order, 19 FCC Rcd 12637, ¶ 54 (2004) ("Given the huge costs of building and operating GSO space stations, we have found that there should be some assurance that operators will be able to continue to serve their customers.").

[14] The Establishment of Policies and Service Rules for the Broadcasting-Satellite Service at 17.3-17.7 GHz Frequency Band and at the 17.7-17.8 Frequency Band Internationally and at the 24.75-25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-Directionally in the 17.3-17.8 GHz Frequency Band, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 8842, ¶ 29 (2007).

[15] *SES Americom, Inc.*, Order and Authorization, 21 FCC Rcd 3430, ¶ 8 (IB 2006) (citing *Satellite Licensing Second Order* ¶ 7); *see also AMSC Subsidiary Corp.*, Order and Authorization, 13 FCC Rcd 12316, ¶ 8 (IB 1998).

[16] *See SES Americom, Inc.*, Memorandum Opinion and Order, 20 FCC Rcd 436, ¶ 8 & n.31 (IB 2005) (citing *Second Round Assignment of Geostationary Satellite Orbit Locations to Fixed Satellite Service Space Stations in the Ka-band*, Order, 16 FCC Rcd 14389 (IB 2001)); *Earth Watch Inc.*, Order and Authorization, 16 FCC Rcd 15985 (IB 2001); *SES Americom, Inc.*, Order and Authorization, 18 FCC Rcd 18061 (IB 2003).

[17] *See NOI* ¶¶ 19.

[18] *See id.* ¶¶ 18-19.

planes to develop new routes or to utilize as backups, satellite operators similarly require flexibility – and are uniquely positioned – to determine customer demand and adjust their fleets accordingly. This approach also matches the approach that exists in other areas of the communications industry.

There are no FCC mandates to deploy new, state-of-the art terrestrial facilities or to retire or restrict the use of older terrestrial facilities. To the contrary, these choices, which are largely driven by the market, are left to the individual FCC licensee to make since they are in the best position to determine need. FCC licenses for terrestrial wireless services are rarely, if ever, conditioned upon a requirement to upgrade technology or network facilities – satellite licenses should be treated the same. When required from either a market or technology demand perspective, satellite operators have upgraded their systems to meet market demands or replace aging systems and will continue to do so. Adopting new rules to govern or restrict a satellite operator's network upgrade decisions would waste valuable assets and deter investment in technologies to improve satellite system design and life. It would reflect the re-emergence of a command and control regulatory system that the Commission long ago abandoned.

In some situations, operators choose to utilize older satellites as backup satellites to ensure their ability to restore service to customers as quickly as possible if there is an unexpected outage or other failure. This network reliability and resiliency is critical to many communications services that satellites provide, such as voice and broadband. In fact, the FCC is currently considering ways to improve the reliability of the nation's communications networks, including satellite networks.[19] Specifically, the FCC is examining network capacity issues, best practices that exist or might be needed to address capacity issues and factors that have an impact

[19] See Reliability and Continuity of Communications Networks, Including Broadband Technologies, Notice of Inquiry, 26 FCC Rcd 5614 (2011).

on the ability to maintain or restore communications operations, including factors that may be unique to satellite networks.[20] In doing so, the FCC has recognized that inadequate network redundancy is a key factor contributing to service disruptions during major emergencies.[21] Thus, redundant satellite facilities serve important network reliability functions, and the Commission should not be deterring, but instead encouraging measures that would enhance network reliability by facilitating use of older satellites as backup or replacement satellites.

Like terrestrial wireless and wireline operators, satellite operators at times seek to explore new service opportunities while minimizing their capital investments in those activities until warranted. Accordingly, satellite operators, as well as terrestrial wireless and wireline operators, may utilize older assets to explore new service opportunities.[22] Of course, if the opportunity makes good economic sense, the operator will move forward with additional investments in a full commercial service launch. However, this decision should be based on economic and other business considerations, such as consumer requirements, not mandated by the FCC.

Additionally, there is no evidence that the age of a satellite (or, for that matter, placing a satellite in inclined orbit)[23] is a significant technology determinant or directly related to the health of a satellite. Most satellites today have useful commercial lives long after their launch.

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[20] *Id.* ¶¶ 20, 37.

[21] *Id.* ¶ 26.

[22] The FCC does not prohibit any of its other licensees from utilizing older assets in their networks. Satellite should not be treated any different.

[23] Satellites drift into an inclined orbit when the operator forgoes North-South station-keeping. This causes the satellite to move in a "figure 8" pattern as seen from the Earth. The movement of the satellite in the sky does not adversely impact earth stations such as those with tracking antennas (*e.g.*, large gateways, earth stations on board vessels, vehicle-mounted earth stations, and earth stations aboard aircraft) or small antennas with large beamwidths (*e.g.*, MSS remotes). For example, the DBSD G1 system is not impacted by the relative movement of the satellite in the sky, so the satellite was initially launched into an inclined orbit in April 2008 and to date remains fully operational in an inclined orbit. *See Improving Public Safety Communications in the 800 MHz Band*, Fifth Report and Order, Eleventh Report And Order, Sixth Report and Order, and Declaratory Ruling, 25 FCC Rcd 13874, ¶ 7 (2010) (noting April 2008 launch of G1 satellite); *ICO Satellite Services G.P.*, Memorandum Opinion and Order, 20 FCC Rcd 9797, ¶ 31 (IB 2005) (authorizing G1's inclined-orbit operations).

In fact, the FCC's current practice of permitting the use of older satellites as replacement satellites on a case-by-case basis is appropriate and should be continued.[24] By restricting the use of older replacement satellites while they can still provide useful services, the Commission risks undermining the economics of the entire industry. It would effectively mandate limits on the financial return that satellite operators can expect on their capital investment – which will, of course, limit such investment. Imagine the impact to terrestrial services if the Commission directed service providers to knock down their cell sites or pull up their cables years before the end of the facilities' useful lives – simply because there is newer technology available. One hopes this is unimaginable. The *NOI*, though, might lead one to believe otherwise. Satellite and other licensees should be encouraged to utilize their existing facilities fully and efficiently, rather than required to dispose those facilities prematurely in favor of costly new facilities.[25]

III. SATELLITE OPERATORS DO NOT PLAN SERVICE GAPS

The *NOI* proposes to limit gaps in service by, for example, requiring an operator to lose its replacement expectancy if service is terminated for legitimate business reasons; requiring an operator to show that it terminated service because of a catastrophic, unforeseen circumstance; narrowly defining "catastrophic" failures that would excuse a gap in service; and prescribing a 90-day replacement expectancy period.[26] Given the substantial investment of time, resources, and capital required to build and launch a satellite, operators have every incentive to ensure that their in-orbit satellites provide commercial service for as long as possible. This should be no

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[24] *See, e.g.*, *Intelsat Licensee LLC, Application to Suspend Operations at the 129° W.L. Orbital Location*, Memorandum Opinion and Order, 27 FCC Rcd 11234 (IB 2012) (granting Intelsat application to replace its relocated Galaxy 27 satellite with its 7-year old Galaxy 12 satellite).

[25] In addition, it would be impractical and virtually impossible for FCC staff to determine whether a particular satellite is healthy enough to remain in service and for how long. Each satellite operates under unique technical specifications and conditions, and it would be unduly burdensome from a resource- and time-commitment perspective for FCC staff to assume the responsibility of making such determinations.

[26] *See NOI* ¶ 13-14.

surprise – every investor in every capital-intensive industry wants to earn the highest possible return on his investment. A "gap" in service is also a "gap" in revenue. Thus, any gap in service from a particular orbital location typically results from unforeseen circumstances forcing an operator to de-orbit or relocate a satellite, and not from any ill-conceived motivation to warehouse spectrum. Space, even today, remains a hostile environment, and all of the investment and technology at the command of the industry cannot eliminate the inherent risks of the space environment.

As the *NOI* recognizes, satellite operators for legitimate reasons generally do not construct spare satellites that may never be used or that could become obsolete by the time of launch and being put into service.[27] Satellite operators also are motivated to make full and efficient use of the existing capacity on their in-orbit satellites, given the opportunity costs of maintaining unused capacity on those satellites. Thus, the Commission often excuses a gap in service to allow an operator to make plans for and implement an emergency replacement satellite in the event of an in-orbit satellite failure.[28]

Further, satellite operators are subject to an ITU rule preventing excessive gaps in service. Specifically, the ITU rule requires that frequency assignments associated with an unoccupied orbital location be brought back into use within three years of the date that use of the assignment was suspended.[29]

Rather than imposing unnecessary or draconian regulatory burdens, the Commission should consider rules that would afford licensees greater flexibility to address gaps in service and implement emergency replacement satellites. Specifically, as the *NOI* suggests, the Commission

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[27] See id. ¶ 16.

[28] See id.

[29] S*ee* ITU Radio Regulations, No. 11.49.

should adopt rules to expedite its review of requests for emergency replacement satellites.[30] These rules, however, should be considered and adopted as part of a separate rulemaking designed to allow additional fleet management flexibility, rather than a rulemaking premised on unfounded assumptions regarding satellite warehousing in the industry.

IV. LICENSE EXTENSIONS SHOULD BE GRANTED TO REWARD POSITIVE CHANGES IN TECHNOLOGY

The *NOI* proposes to limit license term extensions by, for example, limiting the length of an extension to a certain period and requiring satellite operators to provide information on the satellite's health prior to FCC grant of an extension.[31] As the *NOI* notes, in recent years, there have been an increase in satellites' useful lives and an accompanying increase in the number of requests to extend a satellite's license term.[32] This is a positive development that reflects licensees' use of well-considered design practices and effective quality control techniques, which should be rewarded, rather than viewed as a potential warehousing issue meriting regulatory scrutiny.

The Commission should encourage licensees to implement measures such as placing satellites into inclined orbits, which extend the satellite's useful life. It should not limit extensions on existing license terms, thus requiring licensees to launch costly new satellites prematurely and inefficiently. Accelerating the launch of a new satellite in such a manner would force operators to recoup the investment in their existing satellites within a shorter period of time, thus raising the space segment costs for consumers and impairing the competitiveness of satellite services vis-à-vis terrestrial offerings. Moreover, U.S. satellite operators will be at a

[30] *See NOI* ¶ 17.

[31] *See id.* ¶ 20.

[32] See id.

significant competitive disadvantage in both U.S. and foreign markets to the extent that non-U.S. satellite operators are not subject to the same license extension limitations.[33]

Consequently, implementation of new technology should be left to licensees' business judgment and not mandated by regulatory fiat. The Commission does not require terrestrial wireless or other licensees to build with new technologies and should not treat satellite operators any differently.

V. UNUSED CAPACITY EXISTS FOR LEGITIMATE REASONS

The *NOI* proposes to restrict use of underutilized satellites by, for example, canceling a space station license if the percentage of unused capacity exceeds a certain amount or, alternatively, making the unused spectrum available for reassignment.[34] Although the *NOI* acknowledges that satellites may be operating at less than full capacity for a variety of reasons, it nonetheless raises questions regarding whether such operations reflects an intent to warehouse spectrum and thus should be regulated.[35] Unused capacity, however, is common in all telecommunications networks – terrestrial (wireline and wireless) and satellite. As with terrestrial wireline and wireless facilities, satellites typically operate at less than full capacity for legitimate reasons that have nothing to do with warehousing spectrum. These reasons include providing backup capacity during emergencies and ensuring available capacity to meet growing market demand, particularly for new satellites. Unused capacity also benefits consumers by ensuring that supply exceeds demand, thus placing inherent limits on price.

For both satellite and terrestrial wireless operators, spectrum is a scarce resource, and unused spectrum potentially could be reassigned to other licensees. Both satellite and terrestrial

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[33] See id.

[34] *See id.* ¶ 21.

[35] See id.

wireless operators, however, face competitive pressures that are much more effective than any FCC mandate to use spectrum fully and efficiently. No rational policy basis exists for assuming that unused capacity reflects a warehousing intent or for selectively requiring only satellite licensees to operate at an arbitrarily pre-determined minimum capacity level.

VI. THE FCC SHOULD EXAMINE MEASURES TO PROVIDE GREATER SATELLITE FLEET MANAGEMENT FLEXIBILITY

Indeed, none of the practices raised in the *NOI* are presumptively associated with warehousing by satellite licensees or other communications licensees. These practices are performed for legitimate reasons that allow service providers to provide reliable, cost-effective, spectrally-efficient, quality communications to U.S. customers.

Accordingly, the specific "warehousing" questions raised have little or no bearing on whether satellite operators in fact are inefficiently and anti-competitively warehousing spectrum. Any additional regulations to address the *NOI*'s issues regarding service gaps, older replacement satellites, license extensions, and underutilized satellites would undercut the Commission's well-established policies allowing fleet management flexibility without providing any countervailing public interest benefits.

Rather than continuing a proceeding designed to create regulatory burdens that would inhibit satellite investments and innovations, the Commission should conduct a separate rulemaking proceeding to provide satellite licensees with greater flexibility to manage their fleets and implement their systems. EchoStar has expanded its international business in part by leasing Canadian and Mexican orbital slots and rights held by non-U.S. satellite operators, but these arrangements have imposed substantial operational costs. Allowing greater flexibility to EchoStar and other U.S. satellite operators to manage their fleets and fully use their own U.S. orbital resources would reduce their dependence on non-U.S. orbital resources while increasing

spectrum efficiency, thus lowering their operational costs and resulting in more cost-effective service offerings to the public.

Such a proceeding could examine ways to enable satellite operators to better support the needs of U.S. consumers by further streamlining the fleet management rules, consistent with the ITU's efficient spectrum utilization initiative. For example, the Commission should consider the following measures: (1) allowing licensees to provide notification of minor satellite moves within a cluster; (2) allowing a longer time period to build satellites that incorporate new, state-of-the-art technologies; (3) allowing licensees an expeditious process to move satellites to new locations where customer demand exists; and (4) expediting Commission review of requests for emergency replacement satellites. Ultimately, these measures would be more effective in promoting efficient spectrum use, preventing spectrum warehousing, and encouraging greater satellite investment and competition.

CONCLUSION

Despite its lofty goals, the *NOI* raises the potential for unnecessary and burdensome regulations that would stifle competition, investment, and innovation. EchoStar urges the

Commission to terminate this proceeding and instead refocus on consideration of rules that would further enable the satellite industry to support the needs of U.S. consumers through the provision of new and innovative services on a timely, cost-effective basis.

Respectfully submitted,

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