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

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

NOTICE OF INQUIRY

Adopted: June 5, 2013

Released: June 7, 2013

Comment Date: (30 days after date of publication in the Federal Register) Reply Comment Date: (60 days after date of publication in the Federal Register)

By the Commission:

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Heading

I. INTRODUCTION

1. In this *Notice of Inquiry* (*Notice*), we initiate a proceeding to explore allegations made in other Federal Communications Commission proceedings that certain fixed-satellite service (FSS) operators are "warehousing" satellite orbital locations and frequency assignments and are foreclosing

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competitors from purchasing capacity on their satellites.¹ We concluded that there was not enough information in the records of those proceedings to evaluate these allegations, and stated that we would open a separate proceeding to assess potential anticompetitive behavior.²

2. Consequently, this *Notice* opens a proceeding to determine whether, and, if so, to what extent, incumbent satellite operators are operating in ways that inhibit competition in the market for satellite services, particularly in the FSS arena. This examination is timely given the commercial satellite industry's evolution from a relatively nascent industry three decades ago to today's mature industry with over \$168 billion in worldwide revenues.³ Over the last decade, there has been a trend towards industry consolidation, with smaller numbers of satellite operators controlling larger in-orbit fleets. The questions we ask in this *Notice* are intended to solicit comment about the effects of this consolidation. In particular, we seek information about whether FSS providers that have vertically integrated are engaging in vertical foreclosure or other conduct that has harmed consumers of satellite communication services; or whether satellite operators are engaging in conduct that has resulted in efficiencies and lower costs that benefit consumers. The questions are also intended to determine how best to strike a balance between a satellite operator's need for flexibility in managing its fleet of space stations and the public interest benefits of protecting against warehousing.

II. BACKGROUND

3. Pursuant to the Open-Market Reorganization for the Betterment of International Telecommunications Act (Orbit Act), the Commission submits an annual report to the United States Congress concerning the progress made with regard to the privatization of INTELSAT and Inmarsat.⁴ The Commission also reports to the Congress, more generally, on the status of competition in domestic and international satellite communications services,⁵ as required by Section 703 of the Communications Satellite Act of 1962, as amended (the Satellite Act).⁶

4. In response to the public notice issued in preparation for the *Eleventh Orbit Act Report*, several parties known as "integrators"⁷ alleged that Intelsat LLC (Intelsat), which operates a large fleet of

² 11th Orbit Act Report, 25 FCC Rcd at 7864; Third Competition Report, 26 FCC Rcd at 17360, ¶ 202.

³ The State of the Satellite Industry Report is an annual report released by the Satellite Industry Association. http://www.sia.org/wp-content/uploads/2011/06/2011-State-of-Satellite-Industry-Report-June-2011.pdf.

⁴ Open-Market Reorganization for the Betterment of International Telecommunications Act, 47 U.S.C. §§ 701, 706(e) (2000). The intergovernmental satellite body INTELSAT later created Intelsat LLC, a privately-held U.S. corporation that is now the licensee of those satellite assets formerly held by INTELSAT.

⁵ The most recent competition report submitted is the *Third Competition Report*, which focuses on calendar years 2008, 2009, and 2010.

⁶ Amendment to Communications Satellite Act, Pub. L. No. 109-34, 119 Stat. 377 (2005), *codified at* 47 U.S.C. § 703. Our previous Reports were *Annual Report and Analysis of Competitive Market Conditions with Respect to Domestic & International Satellite Communications Services*, IB Docket No. 06-67, 22 FCC Rcd 5954 (2007), and *Second Annual Report and Analysis of Competitive Market Conditions with Respect to Domestic & International Satellite Communications Services*, IB Docket No. 07-252, 23 FCC Rcd 15170 (2008).

⁷ The integrators are satellite service providers who seek to: (1) purchase satellite capacity from satellite operators; (2) enhance the use of such capacity for particular purposes; and (3) resell the enhanced product to end users. Integrators often compete with their own satellite operator to sell to the same end user; in this sense, integrators are analogous to resellers of terrestrial telecommunications services.

¹ See FCC Report to Congress as Required by the ORBIT Act: Eleventh Report, FCC 10-112, 25 FCC Rcd 7834, 7857-7861(2010) (Eleventh Orbit Act Report); Third Report and Analysis of Competitive Market Conditions with respect to Domestic and International Satellite Communications Services, Report and Analysis of Competitive Market Conditions with respect to Domestic and International Satellite Communications Services, FCC 11-183, IB Docket Nos. 09-16 and IB 10-99, 26 FCC Rcd 17284, 17346-17353 (2011) (Third Competition Report).

in-orbit FSS satellites, is preventing the integrators from obtaining capacity on Intelsat's satellites.⁸ In addition, CapRock Communications, Inc. (CapRock), one of the integrators, alleged that Intelsat and "other satellite fleet operators" are "warehousing" scarce orbital resources by failing to replace aging satellites on a timely basis or otherwise failing to provide transponder capacity that reflects current technology.⁹ CapRock argued that these actions restrict the availability and quality of transponder capacity at particular orbital locations and deny competitors access to orbital locations they might use more efficiently with new spacecraft incorporating advanced technology.

5. While the *Eleventh Orbit Act Report* was not the appropriate forum in which to address anticompetitive allegations, the Commission's proceedings for its annual satellite competition reports to Congress provide a natural vehicle for gathering information that could bear on such allegations. In this regard, the International Bureau, in preparation for the *Third Competition Report*, issued a public notice soliciting comment on a variety of issues, including the effects of industry consolidation and corporate reorganization; barriers to entry; the effect of consolidation on service to rural areas; whether there is adequate spectrum; whether satellite operators are using their market power to the detriment of consumers; the effects, if any, of using private equity funding to finance mergers and acquisitions of satellite system operators; information and analysis of the probable effects of potential entrants on the nature and intensity of rivalry among existing competitors in both domestic and international industry segments for communications satellite services; and the effect of growing deployment of fiber optic cables on satellite operators' price and/or service quality.¹⁰

6. In response to the *Third Competition Report* public notice, CapRock repeated and expanded upon the allegations it made in its *Eleventh Orbit Act Report* comments.¹¹ In the *Third Competition Report*, however, we stated that we were unable to reach conclusions regarding these allegations for two reasons.¹² First, the factual information available regarding the "warehousing" allegations was very limited.¹³ Second, there was inconclusive evidence on whether Intelsat restricts or prevents satellite service providers from obtaining spectrum.¹⁴ We concluded that the allegations of warehousing and vertical foreclosure warranted additional analysis in a separate proceeding, where we could develop a record that would allow for a more complete exploration of these issues.¹⁵ Accordingly,

⁸ See CapRock Communications, Inc., Comments in *Eleventh Orbit Act Report*, 25 FCC Rcd at 7834 (filed April 7, 2010) (CapRock *Eleventh Orbit Act Report* Comments), and ARTEL, Inc., Comments *Eleventh Orbit Act Report*, 25 FCC Rcd at 7834 (filed April 7, 2010) (ARTEL *Eleventh Orbit Act* Comments). On July 30, 2010, Harris Corporation acquired CapRock Communications. *See* Harris Corporation SEC Form 8-K, July 30, 2010 at 2 (available at <u>http://www.sec.gov/Archives/edgar/data/202058/000095012310073462/g24273e8vk.htm</u>). In June 2011, two investment firms, TPG Growth of TPG Capital and Torch Fill Investment Partners, acquired a significant interest in ARTEL, Inc. *See* ARTEL Press Release, "ARTEL Announces Major New Shareholders TPG Growth and Torch Hill," June 2, 2011. <u>http://www.reuters.com/article/2011/06/02/idUS111266+02-Jun-2011+BW20110602</u>.

⁹ CapRock *Eleventh Orbit Act Report* Comments at 12-15.

¹⁰ International Bureau Invites Comment for Fourth Annual Report to Congress on Status of Competition in the Satellite Services Industry, Public Notice, 25 FCC Rcd 10049 (Int'l. Bur. 2010) (2009 Public Notice). Although the 2009 Public Notice states that it seeks information for the Fourth Report, the document for which the information was sought was actually the Third Competition Report.

¹¹ See, e.g., CapRock Communications, Inc., Comments in *Third Competition Report*, 26 FCC Rcd 17284, at 5-6 (filed July 22, 2010) (CapRock *Third Competition Report* Comments).

 $^{^{12}}$ Third Competition Report, 25 FCC Rcd at 17286, \P 3.

¹³ *Id.* at 17353-54, ¶¶ 181-183.

¹⁴ *Id.* at 17360, ¶¶ 201-202.

¹⁵ *Id.* at 17286, ¶ 3.

we are seeking further information to develop the record necessary to analyze these allegations.

III. DISCUSSION

A. Allegations of Warehousing

7. CapRock alleges that satellite operators are warehousing scarce spectrum resources.¹⁶ CapRock asserts that operators have "indefinite control" over their orbital locations, and often replace retired satellites with new satellites that do not incorporate state-of-the-art technology or older, in-orbit satellites that do not have any significant marketable capacity.¹⁷ CapRock argues that this practice prevents "newer more efficient spacecraft technologies" from entering the market.

8. This and other types of potential warehousing issues raised in this *Notice* derive from the Commission's "replacement expectancy" policy. Although the Commission has consistently stated that orbital assignments confer no permanent rights of use, it has recognized that given the huge costs of building and operating space stations, there should be some assurance that operators will be able to continue to serve their customers from the same orbital location as these operators retire and replace older satellites.¹⁸ Without this assurance, space station operators would be required to undertake the potentially disruptive and costly process of re-pointing customer antennas to space stations at different locations. Consequently, the Commission generally permits operators to construct and launch replacement satellites at the same location and operate them in the same frequency bands as the retired satellite, without considering competing applications. Thus, we do not place a request for authority to construct, launch, and operate a replacement satellite in a processing queue, as we do with applications to construct, launch, and operate satellites that propose to operate at new locations or in new frequency bands.¹⁹ Rather, if the proposed replacement satellite meets the Commission's Part 25 rules and the operator is otherwise qualified, we grant the request.

9. The Commission defines a replacement satellite as a satellite that is "authorized to operate at the same location, in the same frequency bands, and with the same coverage area as one of the licensee's existing satellites," and will be brought into use at "approximately the same time as, but no later than, the existing satellite is retired."²⁰ The Commission adopted the replacement expectancy policy in 1988, when the first generation of privately-licensed, commercial satellites began to reach their end-of-fuel lives.²¹ At that time, most satellite operators had small in-orbit fleets and generally sought to replace retired satellites at the end of their 10-15 year design life with new, state-of-the-art satellites at the same orbital location.²² Since 1988, however, the satellite industry has evolved substantially. We note that

¹⁶ See CapRock Eleventh Orbit Act Report Comments and Third Competition Report Comments.

¹⁷ CapRock *Eleventh Orbit Act Report* Comments at 14.

¹⁸ See Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, Memorandum Opinion and Order, 3 FCC Rcd 6972, 6973, ¶ 8, n.31 (1988) (1988 Assignment Order).

¹⁹ See Amendment of the Commission's Space Station Licensing Rules and Policies, First Report and Order, and Further Notice of Proposed Rulemaking, 18 FCC Rcd 10760, 10855 (2003) (Space Station Licensing Reform Order), where the Commission adopted new processing rules for space station applications. Specifically, it adopted a first-come, first-served approach for GSO applications, under which it grants an application if the applicant is qualified and the proposed satellite will not cause harmful interference to a previously licensed satellite or to a satellite proposed in a previously-filed application.

²⁰ 47 C.F.R § 25.165. The Commission may authorize "emergency replacement" satellites without considering competing applications, even if there is some lapse in service. *See discussion* at ¶¶ 16-17, *infra*.

²¹ See 1988 Assignment Order, 3 FCC Rcd at 6972.

²² See, e.g., GE Americom Communications, Inc., Memorandum Opinion and Order, 15 FCC Rcd 19671 (Int'l Bur. 2000); and Hughes Communications Galaxy, Inc., Order and Authorization, 3 FCC Rcd 6989 (1988).

mergers and acquisitions have resulted in fewer satellite operators, with the remaining operators having larger numbers of in-orbit satellites in their fleets.²³ We also note that technological advancements have increased the service-life of most satellites beyond their license terms, while the number of orbital locations available for satellites operating in established frequency bands, such as the C-band and Kuband, are much more limited.

10. These trends have led to an increasing number of requests by operators to move in-orbit satellites to different orbital locations where they operate for a period of time before they are moved again as new satellites are launched and older satellites are retired.²⁴ These maneuvers frequently produce lapses in service from a vacated orbital location. In such cases, operators often file an accompanying request to retain their replacement expectancy at the vacated location despite the gap in service. Until we act on such requests, we generally will not make the vacated orbital location available to new applicants or accept applications for this spectrum.²⁵ Further, even when there is no gap in service, operators have requested authority to relocate older, in-orbit satellites to a vacated location, instead of constructing and launching new state-of-the-art satellites that will operate at that location.²⁶ In addition, we have seen a large increase in the number of license extension requests to operate particular satellites up to a decade beyond their original license terms.²⁷

CapRock has expressed the concern that failing to replace retired or relocated satellites 11. on a timely basis, and/or using older "replacement" satellites that do not reflect current technology could restrict consumers' access to state-of-the-art services.²⁸ As mentioned previously, as long as an operator holds a replacement expectancy for a particular orbital location, the Commission will not accept a competing application to provide satellite service from the same orbital location using the same frequency bands.²⁹ This could preclude new or existing satellite operators from building and launching new spacecraft that can offer the benefits of competition and advanced technology. At the same time and as explained above, we recognize the importance of affording operators some flexibility in managing their satellite fleets in a manner that best serves their business and customer needs. Consequently, we consider requests that involve gaps in service or older "replacement" satellites on a case-by-case basis, balancing carefully these sometimes competing concerns. In recent years, the number of instances where we have been called upon to make such case-by-case evaluations has increased to the point where we believe a general inquiry is warranted to explore this area in order to determine whether any new Commission requirements or revised policies might be appropriate.³⁰ We expect that any rules proposed as a result of this proceeding would apply to both U.S. operators and non-U.S. operators providing service to U.S.

²⁶ 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 (Int'l Bur. 2012) (Intelsat 129° W.L. Order).

²⁷ See, e.g., SES Americom, Inc., IBFS File No. SAT-MOD-20120629-00109; Intelsat License LLC, IBFS File No. SAT-MOD-20120320-00057; DISH Operating LLC, IBFS File No. SAT-MOD-20120124-00011; and EchoStar Corp., IBFS File No. SAT-MOD-20100720-00164.

²⁸ CapRock *Eleventh Orbit Act Report* Comments at 14-15.

²⁹ See note 25, supra.

³⁰ Since 2010, we have received nearly two dozen applications that involve potential warehousing issues. *See* cases cited in notes 31, 34, 35, 40, and 45, *infra*.

²³ Telecommunications Competition, Capacity, and Costs in the Fixed Satellite Services Industry, U.S. Government Accountability Office, GAO-11-777, at 17 (Sept. 2011).

²⁴ See, e.g., PanAm Sat Licensee Corp., Petition for Specific Authority Under Section 25.161(c) for C and Ku-band Frequencies at the 72° E.L. Orbital Location, Memorandum Opinion and Order, 27 FCC Rcd 2479 (Int'l Bur. 2012).

²⁵ Space Station Licensing Reform Order, 18 FCC Rcd at 10806.

customers from satellites granted U.S. market access.

1. Issues for Inquiry

12. We seek information that would be useful in addressing: (a) gaps in service; (b) older "replacement" satellites; (c) license extensions; and (d) underutilized space stations. In this regard, we ask for a description of the factors that satellite operators consider in managing their satellite fleets, including: (i) when to de-orbit or relocate an in-orbit satellite; (ii) when to launch a new satellite and what technology to incorporate into the new satellite; and (iii) when to relocate an existing in-orbit satellite to serve as a replacement. We also request commenters to provide examples of the role that these factors play in the decision-making process.

a. Gaps in Service

13. The first potential "warehousing" scenario we present for inquiry involves a gap in service that arises when an operator de-orbits or relocates an in-orbit satellite, and does not immediately place another satellite into the vacated orbital location. The Commission evaluates such requests on a case-by-case basis, attempting to balance the "warehousing" concern against the need for operator flexibility.³¹ To prevent incumbent operators from holding spectrum to the exclusion of others while they decide whether and when to operate another satellite at the vacated location, should we adopt a rule that declares unused spectrum available for reassignment as soon as service is terminated, unless an operator can demonstrate it terminated service because of a catastrophic, unforeseen circumstance?³² In other words, should we codify a policy that an operator will lose its replacement expectancy if it decides, for business reasons, to terminate service on particular frequencies at a particular orbital location? Should we structure such a rule to ensure that only gaps in service caused by "unforeseen, catastrophic" failures are permitted, while gaps caused by business decisions, however legitimate, do not justify a gap in service?

14. We also ask for comment as to whether permitting some gap in service would strike a better balance between providing an operator flexibility in managing its fleet while still safeguarding against warehousing. If so, should we codify this policy with a rule analogous to Section $25.161(c)^{33}$ and allow a space station operator to retain a replacement expectancy for 90 days after it terminates service at an orbital location for those frequencies in which it had been providing service? Should we allow a time period other than 90 days? If so, what should this period be and why? Should it make any difference if the gap in service will be filled by launching a new state-of-the-art satellite or by relocating an older inorbit satellite? Should it make any difference if the gap was caused by de-orbiting an older satellite or by relocating a satellite to a different orbital location?

15. Another situation that frequently arises is where a "replacement" satellite does not operate on all of the frequency bands on which the retired or relocated satellite was operating. In

³¹ See, e.g., Intelsat 129° W.L. Order, 27 FCC Rcd at 11234; DISH Operating LLC, Application to Suspend Operations at the 148° W.L. Orbital Location, Memorandum Opinion and Order, 27 FCC Rcd 5923 (Int'l Bur. 2012) (DISH 148° W.L. Order); PanAm Sat Licensee Corp., Petition for Specific Authority Under Section 25.161(c) for C- and Ku-band Frequencies at the Nominal 72° E.L. Orbital Location, Memorandum Opinion and Order, 27 FCC Rcd 249 (Int'l Bur. 2012).

³² For our discussion on cases involving gaps in service caused by a catastrophic in-orbit failure, *see* ¶ 16, *infra*.

³³ Section 25.161(c) of our rules states that a station authorization shall be automatically terminated upon "[t]he removal...of the facilities which renders the station not operational for more than 90 days, unless specific authority is granted." 47 C.F.R. § 25.161(c). Section 25.161(c) relates to the status of station authorizations for specific facilities that are no longer operating. In other words, if an in-orbit space station experiences a failure that renders it non-operational for more than 90 days or if an operator de-orbits a space station at its end-of-life (rendering it non-operational forever), the authorization for that space station will automatically terminate unless we rule otherwise. The rule does not apply to, nor allow, 90-day gaps in service from a particular orbital location once an authorized space station is removed from that location.

applications where the operator acknowledges that the "replacement" satellite will no longer provide service on certain frequencies, we promptly make those frequencies available for reassignment.³⁴ In other cases, however, the applicant does not specify it will terminate service on certain frequencies.³⁵ This requires additional staff review of the application and can lead to delays in processing. We seek comment on how to expeditiously address these situations. For example, should we require applicants to provide a table of frequencies in each "replacement" application that lists the frequencies used by both the original and the replacement space station? Should we consider an application incomplete under our processing rules if it does not include this table? If applicants do not provide a statement regarding their plans for the "abandoned" spectrum, when should we make this spectrum available for reassignment?

16. Nevertheless, we recognize that there may be instances where a gap in service is caused by unforeseen circumstances. Because satellites are generally expected to have a service life of at least 15 years, are extremely expensive and time-consuming to build and launch, and incorporate evolving technology, satellite operators generally do not construct spare satellites that may never be launched or could be obsolete by the time they are launched. Consequently, if a satellite fails before the operator could be expected to have a replacement satellite ready to begin operations, we excuse a gap in service to allow the operator to make plans for and implement an "emergency" replacement satellite. In these situations, we allow an operator to retain a replacement expectancy to operate another satellite at the same orbital location and in the same frequency bands without being subject to competing applications, despite the gap in service.³⁶ Under our current rules, we consider requests for "emergency" replacement satellites as long as an operator timely launches a new satellite or relocates an in-orbit satellite into the vacant orbital location.³⁷

³⁴ See, e.g., Intelsat 129° W.L. Order, 27 FCC Rcd at 11234 (making Ku-band frequencies at 129° W.L. available after Intelsat stated it did not have plans to use the frequencies).

³⁵ See, e.g., Public Notice, Policy Branch Information, Report No. 00865, Informative: Intelsat Licensee LLC, making the 10.95-11.2 GHz and 13.75-14.0 GHz frequency bands at the 45° W.L. orbital location available for reassignment, noting that Intelsat did not request, and was not authorized, to operate a "replacement" satellite in frequency bands authorized for the previous satellite that had been operating at this orbital location (Oct. 2, 2009); see also Intelsat Licensee LLC, IBFS File No. SAT-LOA-20110929-00193, granted Mar. 22, 2012 (operation of Intelsat 22 at the 72.1° E.L. orbital location without prejudice to any decision regarding Intelsat's replacement expectancy for the 12.25-12.5 GHz frequency band); Intelsat Licensee LLC, SAT-MOD-20110925-00190, granted Jan. 31, 2012 (authorizing Horizons 2 to relocate from 74.05° W.L. to 84.85° W.L. without prejudice to any decision regarding Intelsat's replacement expectancy for the 11.7-12.2 GHz and 14.0-14.5 GHz frequency bands at 74.05° W.L.); Intelsat Licensee LLC, IBFS File No. SAT-MOD-20100115-00010, granted Sep. 17, 2010 (authorizing Intelsat 705 to relocate from 50° W.L. to 29.5° W.L. without prejudice to a decision regarding Intelsat's replacement expectancy for the 12.5-12.75 GHz band at 50° W.L.).

³⁶ This policy is codified in Section 25.113(g) (3) of our rules, 47 C.F.R. § 25.113 (g) (3), which states that where a space station is "determined to be an emergency replacement for a previously authorized space station that has been lost as a result of a launch failure or catastrophic in-orbit failure," the Commission will not place that application in a processing queue.

³⁷ See, e.g., DISH 148° W.L. Order, 27 FCC Rcd at 5923 (denied emergency replacement request given two-plus year vacancy and no concrete plans for the replacement satellite); *Intelsat 129° W.L. Order*, 27 FCC Rcd at 11234 (determined that Intelsat had retained its replacement expectancy due to unexpected in-orbit anomaly and plans to reinstitute service); *Loral Spacecom Corp.*, Order and Authorization, 13 FCC Rcd 16438 (Int'l. Bur. 1998) (granted application filed in April 1997 requesting authority to launch and operate a ground spare as an emergency replacement for the Satcom IV satellite that suffered an in-orbit failure in January 1997); *Volunteers in Technical Assistance*, Order, 12 FCC Rcd 3094 (Int'l Bur. 1997) (granted application filed in January 1996 to launch and operate an emergency replacement satellite for the VITASAT-1 satellite that was destroyed in a launch failure in August 1995; replacement satellite to be launched by March 1997); *American Telephone and Telegraph Company*, Order and Authorization, 10 FCC Rcd 12132 (Int'l Bur. 1995) (authorizing the launch and operation of Telstar 402R by December 1995, which was to serve as an emergency replacement satellite for the Telstar 402 satellite lost (continued....)

17. We seek comment on whether we should propose rules that may allow us to expedite consideration of requests for "emergency" replacement satellites. Initially, should we require an operator to file an application for an emergency replacement within a certain period of time after a launch or inorbit failure? If the operator does not file within this period, should we make these orbital resources available to others at that time? Further, how should we define "catastrophic" failures that would excuse a gap in service? Clearly, if a fully functional five-year old satellite fails in-orbit, we would not expect the operator to have a replacement satellite immediately ready as a substitute. Under these circumstances, we would consider this a catastrophic failure excusing a gap in service. If, however, a fourteen-year old satellite fails a few months earlier than expected, should we not expect the operator to have made significant progress on construction of and have concrete launch plans for a replacement satellite, given the two-to-five year period needed to construct and launch a satellite? In this regard, is it reasonable to expect that operators would have replacement plans finalized and construction underway well before every in-orbit satellite's projected end-of-life? Are in-orbit failures a year or two ahead of projected retirement dates the kind of "catastrophic" in-orbit failures the emergency replacement rule should contemplate? To help us assess whether to excuse gaps in service in these situations, should we require operators to submit, in their annual reports, end-of-life projections for all in-orbit satellites?³⁸ If so, what information should we require operators to include in these reports? Many operators now include the projected end-of-life dates for in-orbit satellites in reports filed with the Securities and Exchange Commission (SEC).³⁹ Should the projected end-of-life dates in the SEC filing be consistent with the endof-life dates in FCC filings? If not, why not? In any case, should we require an operator to file its general plans regarding replacement capacity a specified number of years in advance of an in-orbit satellite's projected end-of-life? Are there any other factors to consider in evaluating requests relating to emergency replacement satellites?

b. Older "Replacement" Satellites

18. Another potential warehousing scenario arises when there is no gap in service but an operator decides to relocate an older, in-orbit satellite to serve as a replacement for a satellite it has deorbited or moved to another location. This could be because the operator does not have the resources to build a state-of-the-art satellite to replace an older or de-orbited satellite, or because the operator decided it can adequately service its existing customer base from a certain location using an older satellite. As with other potential warehousing situations, we consider these requests on a case-by-case basis.⁴⁰

shortly after launch in September 1994); *Hughes Communications Galaxy, Inc.*, Memorandum Opinion, Order and Authorization, 8 FCC Rcd 5089 (1993) (granting Hughes's October 1992 application to construct, launch, and operate an emergency replacement satellite by December 1994 to replace the satellite that failed in August 1992); and *GE American Communications, Inc.*, Order and Authorization, 7 FCC Rcd 3212 (Com. Car. Bur. 1992) (granting GE's October 1991 application to operate the in-orbit Anik D satellite as an emergency replacement for the Satcom IV satellite that failed in the fall of 1991).

³⁸ Most space station operators are required to submit annual reports to the Commission detailing the status of their space stations. Depending on the service, the operator may have to provide the status of satellite construction and expected launch dates, and a detailed description of the utilization of in-orbit satellites, including outages, and any transponders not available for service. *See* 47 C.F.R. §§ 25.142 (c), 25.143 (e), 25.145 (f) (1), 25.146 (l), and 25.210 (l). We have proposed to consolidate these reporting requirements into a single rule. *See Comprehensive Review of Licensing and Operating Rules for Satellite Services*, FCC 12-117, Notice of Proposed Rulemaking, 27 FCC Rcd 11619 (2012).

³⁹ See, e.g., DISH Network Corp., Annual Report Pursuant to Section 13 or 15 (d) of the Securities and Exchange Act of 1934, Fiscal Year ended Dec. 31, 2011 (filed Mar. 19, 2012) at F15 (10K); and Hughes Satellites System Corp., Quarterly Report Pursuant to Section 13 or 15 (d) of the Securities and Exchange Act of 1934 for the Quarterly Period Ending Sept. 30, 2012 (filed Nov. 6, 2012) at 10-11.

⁴⁰ See, e.g., Intelsat 129° W.L. Order, 27 FCC Rcd at 11234 (Intelsat sought to replace its relocated Galaxy 27 satellite with its 7-year old Galaxy 12 satellite).

⁽Continued from previous page)

19. We request comment on the use of older satellites as replacement satellites and whether this practice restricts transponder capacity and results in an underutilization of spectrum resources. Further, we request comment on whether or to what extent allowing operators to use older satellites as replacements precludes the use of newer technologies that can provide improved services to consumers. To the extent commenters recommend rules restricting the use of older satellites as replacements, are there any circumstances under which an exception to this rule may be justified? Further, should any limits on using older satellites as replacement satellites be based upon the age of the relocated satellite?⁴¹ For example, should we permit an operator to replace a 13- or 14- year old satellite with another satellite that is 13- or 14-years old? Should we be more concerned about the health of the "replacement" satellite, rather than its age? Should we require operators to submit information regarding the "health" of the replacement satellite and, if so, what information should be provided? Further, should we preclude older replacement satellites from operating in inclined orbit, which further restricts the types of services the satellite may provide?⁴² We have previously stated that we do not intend to allow satellites operating in inclined orbits to impede the introduction of new satellite technology.⁴³ To this end, we stated that we will consider orbital locations occupied by satellites in inclined orbits operating past their original license terms as being potentially available for reassignment to a new state-of-the-art satellite.44

c. License Extensions

20. During the last few years, we have seen an increase in satellites' useful lives and an accompanying increase in the number of requests to extend a satellite's license term well beyond its initial license term.⁴⁵ While it may be possible for a satellite to operate an additional decade or more beyond its original license term, do lengthy extensions allow inefficient or partially-functioning satellites to block access to newer, state-of-the art satellites? Before granting any extensions, should we require the operator to submit information regarding the satellite's health? If so, what information should we require? Should we require operators to file projections analogous to the projections filed with the SEC?⁴⁶ Further, is it

⁴⁴ Id.

⁴¹ Section 25.118 (e) of the Commission's rules, 47 C.F.R. § 25.118 (e), permits a space station operator to relocate a licensed GSO space station to another orbital location that is assigned to that operator without prior Commission approval if certain conditions are met. Section 25.118(e) contains no limitations on the ages of the relocated space stations.

⁴² Operation in an inclined orbit requires earth stations accessing the space station to have special tracking capabilities in order to maintain a usable signal. Inclined orbit is not typically employed in new satellites because it limits the types of services that can be offered. An inclined orbit is typically utilized to extend the useful life of the satellite because it conserves fuel. Disadvantages of inclined-orbit operation include intermittent loss of signal strength at the edges of the coverage beams in the downlink direction since the space station is not accurately pointing at its intended target area all of the time. Inclined orbit operations are governed by Section 25. 280 of the Commission's rules, 47 C.F.R. § 25.280.

⁴³ Streamlining the Commission's Rules and Regulations for Satellite Application and Licensing Procedures, Report and Order, 11 FCC Rcd 21581, 21589 (1996).

⁴⁵ The license term for most space stations is 15 years. 47 C.F.R § 25.121. If a licensee wants to operate a space station beyond its license term, it must file an application to modify the space station license, specifying the length of the extension requested. We review these applications on a case-by-case basis. *See, e.g.*, DISH Operating LLC, IBFS File No. SAT-MOD-20120124-00011, granted Oct. 18, 2012 (extending 10-year license term of EchoStar 7 for ten years); SES Americom, Inc., IBFS File No. SAT-MOD-20111025-00209, granted Feb. 24, 2012 (extending license term of AMC-2 for four years); Lightsquared Subsidiary LLC, IBFS File. No. SAT-MOD-20111128-00228, granted March 22, 2012 (extending license term of MSAT-2 for one year). *See also* Intelsat Corp., IBFS File No. SAT-MOD-20121002-00176 (requesting eight-year extension of Intelsat 5's 15-year license).

⁴⁶ See note 39, supra.

even advisable to grant lengthy extensions or should we, instead, limit the length of a license extension to a certain period, say three or five years, after which we could consider another extension based on the satellite's health at that time? How can we apply any license extension limitations to non-U.S.-licensed satellites granted market access to the United States? Because we do not issue U.S. licenses for these satellites and because market access grants do not have a termination date, when, and how, can we make the same types of assessments regarding the health of non-U.S.-licensed satellites? Should we place time limits on market access grants commensurate with the time limits in U.S. space station licenses? If not, why not? If we do not apply license extension limitations to non-U.S. satellites, how would this impact U.S. satellite operators? Last, what factors should we consider in addressing license extensions for satellites operating in inclined orbit?

d. Underutilized Space Stations

21. Regardless of age, space stations may not be operating at full capacity for a variety of reasons. Does this create a concern that the operator is warehousing spectrum to the exclusion of other entities? Should we propose a rule that automatically terminates a space station license if the percentage of unused capacity exceeds a certain amount? If so, what should this percentage be? If we do not cancel an authorization for an underutilized satellite, should we, at a minimum, make the unused spectrum available for reassignment? If so, when? Are there instances in which such "non-use" may be acceptable?

B. Allegations of Vertical Foreclosure

1. Analytical Framework

22. Integrators purchase satellite capacity or bandwidth from satellite operators to create a bundle of services specifically tailored to the needs of a particular customer.⁴⁷ With recent consolidation and vertical integration by satellite providers, some integrators allege they are being foreclosed from securing satellite bandwidth capacity such that they are less able to compete against the satellite providers' affiliated integrator.⁴⁸ For example, through its 2004 acquisition of COMSAT General Corp., Intelsat was able to create Intelsat General Corp (IGC), which provides a "wide range of customized, secure, end-to-end communications solutions for commercial, government and military customers."⁴⁹ As a result, Intelsat is now able through IGC, its affiliated integrator, to provide customer-specific services to government and corporate customers that include satellite bandwidth capacity along with terrestrial segment services and other related services. In this way, Intelsat is both a provider of satellite services to integrators and a competitor to integrators, through IGC.

23. Notwithstanding the integrators' allegations that their access to satellite services has been foreclosed, our focus is on protecting competition rather than protecting particular competitors.⁵⁰ Thus,

⁴⁷ Typically, the integrator responds to a procurement request issued by a government or corporate customer. The request lists the geographic points involved, the technical requirements, the satellite bandwidth capacity needed, and contract duration; and, generally, the request is multi-part, consisting of technical details, service and management details, and price requirements.

⁴⁸ In some instances, satellite operators use their capacity to create their own customer-specific packages and, in the process, become competitors to the integrators, who are seeking to respond to the same procurement request.

⁴⁹ http://www.intelsatgeneral.com/about-us.

⁵⁰ See Structure and Practices of the Video Relay Service, 26 FCC Rcd 17367, 17399, ¶ 66, n.158 (quoting Bell Atlantic Mobile Systems and NYNEX Mobile Communications Co., Memorandum Opinion and Order, 12 FCC Rcd 22280, 22288 (1997); see also SBC Communications Inc. v. FCC, 56 F.3d 1484 (D.C. Cir. 1995); Revision of The Commission's Program Access Rules, Notice of Proposed Rulemaking, 27 FCC Rcd 3413, 3427, ¶ 25 (2012) (citing Implementation of the Cable Television Consumer Protection and Competition Act of 1992 – Development of Competition and Diversity in Video Programming Distribution: Section 628(c) (5) of the Communications Act: (continued....)

harm to the integrator firms themselves – *e.g.*, loss of business and profits — is not considered a public interest harm if end users are not harmed. But some integrators, however, contend that, in some instances, government and corporate customers also have been harmed due to lost competition from non-affiliated integrators for whom access to satellite bandwidth capacity has been lessened or foreclosed.⁵¹ In the *Third Competition Report*, we described a multi-step analytical framework for examining the vertical foreclosure allegations and whether consumers are being harmed. This framework is consistent with other Commission analyses of vertical competitive issues and with approaches used in the antitrust arena, generally; and we propose to use it here.⁵² We invite comments on this framework.

24. The first step in this framework is to determine whether the alleged foreclosure conduct has or could be effective in lessening competition at the input level by excluding satellite integrators from acquiring bandwidth capacity. Successful foreclosure strategy is only possible if the integrator cannot secure substitutable satellite bandwidth from another satellite operator. Exclusion is not possible if there are other providers of bandwidth or adequate substitutes available. As a result, a finding of market power, i.e., the *ability* to exclude, is one *necessary* condition for the foreclosure to be harmful to competition and consumers.

25. Second, even where we find that a satellite provider has the *ability* to exclude at the upstream level, it is necessary to determine whether the newly integrated firm also has the ability to compete effectively as a provider of satellite services to end users. The incentive to engage in such foreclosure strategy exists when a satellite operator, by providing its services directly to end users, can achieve higher long-run profits by limiting access to its capacity to integrators and changing the market structure at both levels. If a satellite operator has no way of making its services effectively available to end users, however, it is unlikely that it has an incentive to foreclose access of its capacity to integrators.

26. The third step of our analysis requires that we consider whether the vertical integration has created procompetitive cost savings and efficiencies, that likely will be passed on to end users; or, instead, is more likely to result in consumers and/or customers experiencing increased price or degraded service quality. This requires that first we consider whether the satellite operator's vertical integration creates efficiencies that are not possible with an un-integrated structure. For example, cost savings might result from integrating production, internalizing externalities and correctly aligning incentives, or eliminating double marginalization.⁵³

(Continued from previous page) -

Sunset of Exclusive Contract Prohibition, Report and Order, 22 FCC Rcd 17791, 17833-34, ¶ 61 (2007), aff'd sub nom. Cablevision Sys. Corp. et al. v. FCC, 597 F.3d 1306, 1313 (D.C. Cir. 2010)).

⁵¹ See, e.g., ARTEL Eleventh Orbit Act Comments at 5; CapRock Eleventh Orbit Act Comments at 10.

⁵² In recent years, the Commission has considered vertical integration issues in the context of several mergers/acquisitions, each with different fact patterns leading to somewhat different analyses. See General Motors Corporation and Hughes Electronics Corporation, Transferors, and The News Corporation Limited, Transferee, Memorandum Opinion and Order, 19 FCC Rcd 473 (2004); Robert M. Franklin (transferor) and Inmarsat plc. (transferee) Consolidated Application for Consent to Transfer of Control of Stratos Global Corporation and Its Subsidiaries from an Irrevocable Trust to Inmarsat, plc., DA 09-117, Memorandum Opinion and Order and Declaratory Ruling, 24 FCC Rcd 449 (Int'l Bur. 2009), application for review pending; and Applications of Comcast Corporation of Licensees, Memorandum Opinion and Order, MB Docket 10-56, 26 FCC Rcd 4238 (Media Bur. 2011). See also Jonathan B. Baker, "Comcast/NBCU: The FCC Provides a Roadmap for Vertical Analysis," Antitrust, Vol. 25, No. 2, Spring, 2011 at 36-42; and Michael H. Riordan & Steven C. Salop, Evaluating Vertical Mergers: A Post-Chicago Approach, 63 ANTITRUST L.J. 513 (1995), at 527-551.

⁵³ Double marginalization occurs where an upstream firm sells an input to a downstream firm at a price that exceeds marginal cost, and the downstream firm then sells its product in the downstream market at a price that exceeds its marginal cost. The margin charged by the upstream firm increases the marginal cost of the downstream firm, which results in a higher end-user price than would occur if the input had been priced at marginal cost. Vertical integration (continued....)

27. Fourth, if we find such efficiencies as a result of the vertical integration, we must determine the likelihood of whether they will be passed on to consumers. If, for example, there are other firms that can serve as effective competitive constraints or consumers are able to switch their demand to substitute services and avoid entirely the offering of the satellite operator, the efficiencies from the vertical integration more likely will be passed on to end users. Alternatively, if there are no substitute services or alternative effective competitors, the vertically integrated firm will have the ability and incentive to substantially increase the markup of price, notwithstanding its cost savings from the vertical integration. Accordingly, we consider the net changes in price and quality they experience as a means of determining whether the efficiencies from the vertical integration have been passed on to consumers.

28. Fifth, we must determine whether there is a link between vertical integration and harmful horizontal collusion, *i.e.*, whether vertically integrated satellite operators will, in order to create some integrated service packages, purchase bandwidth from each other, and whether that relationship might have an impact on competition. If a satellite operator's ability to compete on a bid is dependent upon being able to purchase capacity from a competing satellite provider, this likely will result in (i) a reduction in the number of competing bidders, *i.e.*, the number of bidders is reduced because the satellite operators will submit a joint bid; and/or (ii) increased bid prices, because the cost of purchasing the satellite bandwidth capacity likely will be known to the satellite provider also competing for the bid. We note that each integrator contract is unique; therefore, we do not seek general analyses of "market definition," or, indeed, general analyses of competitive circumstances. Rather, detailed information from specific RFPs and their corresponding bid responses should yield relevant information such as the number of market participants and the presence or absence of competitive options in each disputed instance.⁵⁴ We will consider, however, any general discussions of market definition and competition that commenters provide.

2. Issues for Inquiry

29. The specific information and data we seek are intended to allow us to apply the forgoing analytical framework. The following questions invite comment for each part of that framework.

30. For commenters arguing that harmful foreclosure has occurred, we seek specifics on the nature and scope of the claimed foreclosure. Commenters should detail to the fullest extent possible factors such as the time period the allegations cover, the geographic routes involved, and the amount and type of space segment capacity (Ku-band, C-band, etc.) involved. In addition, what satellite contracts are involved? What customers, and what customer contracts, are involved? Exactly what terrestrial transmission facilities and network management services are combined with the space and earth segment services to produce the integrated service package under dispute? What is the size of the disputed business, either in absolute terms or relative to the size of the excluded integrators' business, the FSS operators' business, or the total demand of the affected customer(s)? And what percentage of a customer's total cost does the space segment cost constitute?

⁽Continued from previous page)

can eliminate the problem of double marginalization, because the integrated firm, in determining the uniform price at which it will sell the downstream product, will consider the real economic cost of producing the input. Because vertical integration effectively reduces the marginal cost of the input in this situation, it results in the integrated firm setting a lower price for the downstream product, benefiting consumers. *See* Riordan & Salop at 526-527.

⁵⁴ This approach is consistent with the current U.S. Department of Justice and Federal Trade Commission merger guidelines, which state, for example: "The Agencies' analysis need not start with market definition. Some of the analytical tools used by the Agencies to assess competitive effects do not rely on market definition, although evaluation of competitive alternatives available to customers is always necessary at some point in the analysis." U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, at 7 (August 19, 2010), available at http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf.

31. Regarding the first step of the framework, we seek details on the nature and extent to which there are substitutable options for the satellite bandwidth capacity. For example, explain whether it is possible for integrators to self-provide bandwidth capacity by launching their own satellites or hosted payloads? Is it possible for new independent suppliers of satellite capacity to enter the market by launching their own satellites? In addition, are there any other factors that limit or enhance the market power of FSS operators? For example, do entry barriers prevent the emergence of closely substitutable options in the near term? For the particular traffic at issue, commenters should detail the presence or absence of other satellite bandwidth operators.⁵⁵ With respect to alternative operators, describe the extent and availability of their satellite bandwidth capacity. With respect to non-FSS satellite options, explain how the price, service characteristics, and quality of service options they provide compare to the service provided by satellite operators.

32. To assist us in the second step of our framework, we are requesting information on the delivery of FSS and substitutable service options to end users. We seek comment on alternative downstream providers available to end users. This should include information and discussion about the effectiveness of vertical integration and information regarding the differences, if any, in quality characteristics, featured and service rates offered by vertically integrated providers compared to services provided by integrators. Information about whether entry barriers or switching costs limit vertical integration would assist this analysis. Further, we invite commenters to provide information regarding the availability (if any) of a sufficient number of remaining bidders, the existence of effective substitute services to which buyers can switch, the role, if any, of countervailing bargaining power possessed by customers, and whether there are any other factors that limit or enhance the ability of vertically integrated satellite operators to behave anticompetitively in the retail or commercial market.⁵⁶

33. To complete step three in our analysis, we request information that will assist us in measuring the cost savings and efficiencies that, if any, likely would result from vertical integration by satellite operators that enables them to provide satellite services directly to end users. Ordinary course financial forecasts that attempt to measure such cost savings would be particularly helpful. Alternatively, comment on why such vertical integration would not reduce costs and create efficiencies would be helpful to our analysis, especially ordinary course financial planning documents demonstrating why no such cost savings would result from the integration.

34. To address the fourth step in our framework, we request information that will demonstrate whether these efficiencies have been passed on to end users. We seek information quantifying the effect of the vertical integration on the services provided to customers or end users, including changes in: the number of bidders, the features and quality of service provided by the selected bidder, and bid rates. This information should be provided for winning bids for which a vertically integrated satellite operator has participated, as well as to information about bids for which a vertically integrated operator did not participate. Explain, for example, circumstances in which a satellite operator

⁵⁵ We presume that in all disputed instances of possible foreclosure, fiber optic cable service is not an available alternative to satellite service. We invite comments, however, on cable alternatives in cases where this presumption is inaccurate.

⁵⁶ See, e.g., the United States Government Accountability Office, Report on Competition, Capacity, and Costs in the *Fixed Satellite Services Industry*, GAO-11-777, September 2011 (GAO Report) which states that the Department of Defense has reversed its previous view that it benefited from procuring services via small integrator firms, and is transitioning together with the General Services Administration (GSA) to a joint, open procurement process in which any entities, including integrators and space segment operators, may bid. This shift is being accomplished via the adoption of a new joint GSA/Defense Information Systems Agency (DISA) contracting vehicle, the Future COMSATCOM Services Acquisition (FCSA) program, and the ending of the current vehicle, the Defense Information Systems Network Satellite Transmission Services-Global (DSTS-G) process. *See* Future Commercial Satellite Communications Service Acquisition (FCSA), at http://www.gsa.gov/portal/content/105299.

has foreclosed access to satellite bandwidth capacity to an integrator(s), but nonetheless fails to win the customer's contract. In cases where the vertically integrated operator has been successful in winning a bid, explain why the operator was selected. For example, was the selection of the vertically integrated provider due to the absence of other bid responses, a lower rate due to cost saving efficiencies from the vertical integration, or something else? As noted above, each contract or bid for integrated, satellitebased, end-to-end communications infrastructure is unique, and individual contract awards are not based on price alone, but rather on a set of price and non-price factors. These facts make it difficult to develop data on, for example, prices of service before and after some integration/exclusion event, or prices over time. Accordingly, we invite comment on what price and quality data may be available and most helpful, and on how to best assess such data. How, in practice, can we best quantitatively determine whether customers have been adversely affected or benefited by satellite operator vertical integration? If useful data on price and quality changes experienced by customers are not available, would data on the number of bidders in procurements where integration/foreclosure has occurred, and in comparable procurements where it has not, be helpful in assessing harm to customers? Are such data available? We invite these and any similar data, as well as suggestions on how to assess such data. We also invite any other suggestions on quantitative approaches to determine the impact of integration/foreclosure on customers.⁵⁷

35. Finally, with respect to step five of our framework, we seek comment on whether the vertical integration itself was facilitated by horizontal collusion among satellite operators, and/or whether the vertical integration has enhanced or deterred coordinated interactions among potential bidders. This would include comment or information explaining whether it is necessary for a satellite provider to coordinate with another satellite provider before it can be effective as a direct supplier to an end user? We also seek comment on whether vertical integration has increased the likelihood or reduced the cost of coordinated behavior, explicit or tacit, by facilitating the sharing of information that would assist in bid coordination, parallel pricing and other conduct resulting in anticompetitive harm. For example, we seek comment on whether vertical negotiations and contracts for bandwidth between a vertically integrated satellite provider and an integrator would result in an increase in bid rates to the customer because the operator would know the floor of the integrator's bid rate and/or prevent the integrator from bidding because it was foreclosed access to obtaining the operator's bandwidth capacity. Similarly, we seek comment on competition among vertically integrated operators and request evidence to the extent that negotiating for or purchasing the other operator's capacity provided insight into pricing strategies.

36. While, as noted previously, our focus is on past behavior, if commenters believe there is reason to think that the competitive picture going forward will differ from what it has been in the recent past, we invite explanation of these circumstances. In addition, we seek comment on appropriate remedies that could be implemented by the Commission. What solutions would effectively address foreclosure harmful to the public interest? What adverse side-effects might these solutions themselves cause?

IV. CONCLUSION

37. For the reasons discussed above, we invite comment from space station licensees, customers and other interested parties on the various proposals addressing the vertical foreclosure and warehousing issues raised in this Notice. Commenting parties are asked to explain their positions in

⁵⁷ The *GAO Report* presents the results of statistical work estimating the average federal procurement cost for space segment bandwidth over 2003-2010. We note, as described in the *GAO Report*, that the Department of Defense, has reversed its previous view that it benefited from procuring services via small integrator firms, and is transitioning together with the GSA to a joint, open procurement process in which any entities, including integrators and space segment operators, may bid. We invite comment on the significance of these policy changes. In addition, the *GAO Report* describes the change in the number of eligible vendors resulting from the new procurement approach. Are these data on federal procurement helpful in assessing the particular issues raised here? We also invite comment on the significance of any other information or analysis in the *GAO Report*.

detail. Commenters are also invited to recommend alternatives.

V. PROCEDURAL MATTERS

A. *Ex Parte* Presentations

38. Although a Notice of Inquiry proceeding is generally exempt from the *ex parte* rules, we find that the public interest is best served by treating this critical security matter as a "permit-butdisclose" proceeding.⁵⁸ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206 (b). In proceedings governed by rule 1.49 (f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules. Parties wishing to file materials with a claim of confidentiality should follow the procedures set forth in section 0.459 of the Commission's rules. Confidential submissions may not be filed via ECFS but rather should be filed with the Secretary's Office following the procedures set forth in 47 C.F.R. § 0.459. Redacted versions of confidential submissions may be filed via ECFS.

B. Comment Filing Procedures

39. Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.
- Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by firstclass or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission. All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

⁵⁸ See 47 C.F.R. §§ 1.1200(a), 1.1204(b)(1).

• U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington, DC 20554.

C. Accessible Formats for People with Disabilities

40. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

VI. ORDERING CLAUSE

41. Accordingly, IT IS ORDERED that, pursuant to sections 1, 4 (i), 4 (j), 4 (o), 301, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154 (i)-(j) & (o), 301, and 403, section 1.430 of the Commission's Rules, 47 C.F.R. § 1.430, this Notice of Inquiry IS ADOPTED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch Secretary