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FCC AUTHORIZES \$9.7 BILLION IN INCENTIVE PAYMENTS TO FIXED SATELLITE SERVICE OPERATORS AS PART OF 5G C-BAND SPECTRUM RELOCATION AUCTION

March 2, 2020

I. Executive Summary

On February 28, 2020, the U.S. Federal Communications Commission ("FCC") voted to adopt a "Report and Order" to make 280 MHz of C-Band (3.7 – 4.2 GHz) spectrum currently licensed to Fixed Satellite Service ("FSS") operators available to terrestrial flexible wireless 5G (next generation broadband) telecommunications services through a spectrum auction to be held commencing on December 8, 2020. The FCC also authorized up to \$9.7 billion in incentive payments to the FSS licensees to accelerate their relocation from the C-Band spectrum, the incentives to be paid from the new 5G licensees' winning bids. In separate action, the FCC sought public comment on proposed procedures for the auction.

II. Background

The C-Band of electromagnetic spectrum has been a mainstay of FSS using large geostationary or geosynchronous satellites¹ for decades, used to transmit voice, data and video. However, newer commercial satellite services, including for FSS broadband, have increasingly gravitated to higher frequency Ku-Band (approx. 10 – 12 GHz) and Ka-Band (approx. 17 – 20 GHz). Moreover, the fastest growth in satellite services is not in FSS, but in "Low Earth Orbit," or "LEO" services, also not as dependent on the C-Band.² At the same time, the accelerating growth of terrestrial broadband service, including the still-in-deployment 5G, has increased demand for the FSS operators' legacy C-Band licensed spectrum. Accordingly, the FCC proposed a C-Band auction for 5G to include 280 MHz of FSS spectrum.

¹ A geostationary orbit is at a fixed altitude of 35,786 km (22,235 miles) above the earth's equator, is synchronized with the earth's rotation and has a period equal to a sidereal day, 23 hours, 56 minutes and 4.1 seconds (as opposed to the solar day of 24 hours). The orbit must be "prograde," eastward (the same direction as the earth's rotation), and have a nearly zero eccentricity, or angle to the earth's equator. In other words, the orbit is circular above the equator, and the satellite appears to an earth-based observer to remain stationary above the same spot on the earth's surface, since it is orbiting at the same speed and angle as the earth's rotation. A geosynchronous orbit also has a period equal to a sidereal day and must be prograde. However, the orbit may be eccentric; inclined at any angle to the earth's equator. The orbital appearance of an inclined orbit as seen from an earth-based observer is a "figure 8," a track known to astronomers as an "analemma." Geostationary/Geosynchronous satellites tend to be the heaviest and most costly satellites, largely because of the weight and costs of the satellites' station-keeping thrusters and on-board fuel. These factors also increase launch and weight cost, and in turn increase insurance costs.

² LEO satellites orbit at altitudes between 750 and 2,500 km with orbital periods of up to two hours.

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In 2018, the FCC issued a "Notice of Proposed Rulemaking," or "NPRM," to make the C-Band available for 5G. In response, the four largest FSS providers, Intelsat, SES, Telesat and Eutelsat, formed the "C-Band Alliance" to promote their shared interests in the FCC regulatory proceeding. The alliance opposed a spectrum auction on the assumption that they would realize more for their spectrum licenses in a private sale. In November 2019, the FCC announced that an auction of the C-Band spectrum would take place notwithstanding the alliance's opposition. Eutelsat and then Intelsat left the alliance, leaving SES and Telesat its only members, with substantially decreased leverage to influence the contours of the planned auction. Also, in February 2020, proxies for Intelsat dangled the possibility of a bankruptcy filing to gain leverage over the FCC, since a bankruptcy proceeding would stay and supersede the FCC's planned auction of Intelsat's spectrum (the U.S. Supreme Court has held that FCC-licensed public airwaves are a bankruptcy estate asset, and that while a bankruptcy stay against all creditors is in place, the FCC may not rescind a spectrum license for mere failure to pay license fees and auction or otherwise license the spectrum to another party without the bankruptcy court's consent³).

III. FCC Action

The February 28, 2020 FCC Report and Order allocates the 280 MHz of C-Band spectrum to auction the 3.7 - 4.0 GHz portion of the band for flexible mobile 5G use. 20 MHz (3.98 - 4.0 GHz) will be reserved as a "guard band" to prevent interference between 5G and satellite service. Existing FSS satellite operations will be moved into the upper 200 MHz of the C-Band, from 4.0 - 4.2 GHz. The 280 MHz of C-Band spectrum is to be transitioned to flexible 5G use by December 5, 2025.

Pursuant to the FCC's Report and Order, the relinquishing FSS operators will be eligible for accelerated relocation "incentive" payments of up to \$9.7 billion if they commit to, and successfully execute, "clearing" (relinquishing) the spectrum earlier than the deadline, with phased eligibility deadlines for clearing different blocs of the spectrum by December 5, 2021 (Phase I) and December 5, 2023 (Phase II). The new flexible use 5G licensees will be responsible for the incentive payments to the clearing FSS licensees. The FCC is creating a "Relocation Payment Clearinghouse" to manage the incentive payment/accelerated clearing of spectrum process.

In a separate NPRM, also on February 28, 2020, the FCC sought public comment on procedures for the planned auction of the 3.7 - 3.98 GHz portion of the C-Band, designated as Auction 107, with bidding scheduled to commence on December 8, 2020. The auction method proposed is the "ascending clock"

³ FCC v. NextWave Personal Communications, Inc., 537 U.S. 293 (2003).

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auction design, in which bidding for generic blocs of spectrum in each geographic area proceeds in successive clocked bidding rounds, and thereafter winning bidders from the clock phase are allowed to bid for frequency-specific licenses. The NPRM also proposes bidding caps of \$25 million for small business and \$10 million for rural service providers, and a \$10 million cap on the overall amount of bidding credits that a small business bidder may apply to winning license bids in small markets, all intended to ensure that the spectrum is not immediately all taken up by the largest operators deliberately overbidding to shut out smaller bidders.

If you are interested in bidding in the spectrum auction or commenting on the proposed auction procedures or would like additional information, please contact us at info@kurtinlaw.com.

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