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**Subject: Consultation Paper on Auction of Spectrum in Frequency Bands Identified for IMT/5G
Consultation Paper No. 8/2021**

Dear Sir,

SES World Skies Singapore Pte Ltd, a wholly owned indirect subsidiary of SES S.A., (together, “SES”) is pleased to submit its counter comments on the Telecom Regulatory Authority of India (“TRAI”) Consultation Paper on *Auction of Spectrum in Frequency Bands Identified for IMT/5G*, released on 30 November 2021 (“Consultation”).¹

SES reiterates its previous submission and supports the substance of the comments and counter comments submitted by the Global Satellite Operators Association (“GSOA”) and the Satcom Industry Association of India (“SIA-India”).

As SES and other commenters have submitted,² the 27.5-29.5 GHz band should be withdrawn from India’s 5G spectrum auctions and preserved for satellite services instead. Keeping the band for satellite will enable the rapid expansion of broadband availability throughout the country using the latest High Throughput Satellite systems and technologies. By some estimates, the benefit to would be as high as an USD 186 billion annual increase in India’s GDP by 2030.³ In contrast, reallocating the

¹ See TRAI, Consultation Paper No.8 of 2021, *Auction of Spectrum in Frequency Bands Identified for IMT/5G* (30 Nov. 2021) (“Consultation”), at <https://www.traigov.in/consultation-paper-auction-spectrum-frequency-bands-identified-imt5g>.

² SES Comments at 2-5; GSOA/AVIA/APSCC/GVF Comments at 16-20; Satcom Industry Association of India Comments at 4-5, Responses to Q.6, Q.7, Q.8; India Space Association Comments at 1-6; AsiaSat Comments at 12-13; Bharti Airtel Comments at 11-14; Hughes Comments at 2-4; Nelco Comments at 1-2; OneWeb Comments at 2-5; Telesat Comments at 1-4; ViaSat Comments at 1-7.

³ Plum Consulting, *Expanding Digital Connectivity Through Satellite Broadband in the 28 GHz Band*, at 5 (Oct. 2021), available at <https://plumconsulting.co.uk/expanding-digital-connectivity-through-satellite-broadband-in-the-28-ghz-band/>.



band for 5G will likely yield limited benefits in light of the ample, harmonized spectrum for 5G in the 24.25-27.5 GHz band and the international evidence of uncertain demand for 5G applications in the millimetre wave frequencies.⁴ Accordingly, India should not take spectrum from in-demand satellite services in order to feed uncertain demand for 5G in the millimetre bands.

As for the C-band, India's broadcasting industry has confirmed the continued importance and vitality of the band in the broadcast ecosystem.⁵ The international evidence shows that the 300 MHz of spectrum in the 3300-3600 MHz band should provide more than enough mid-band 5G spectrum for India's three private mobile network operators and one state-owned operator. Assuming the state-owned operator (which serves 10% of the market) receives the minimum 40 MHz to provide 5G services, the three private mobile operators (which serve 90% of the market) will have access to more than 80 MHz each, with reasonable prospects for a competitive auction. There is thus no need to disrupt the vibrant broadcasting industry in India by taking the 3600-3670 MHz for 5G. The band should instead be retained for satellite services, with appropriate measures to protect such satellite services from 5G emissions in the band below 3600 MHz.

Please contact me or my colleague, Tare Brisibe (tare.brisibe@ses.com), if you have any questions.

Yours Sincerely,

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⁴ See SES Comments at 4 (noting the lack of buildout in the 26/28 GHz band in Korea, the lack of demand for 26 GHz spectrum in Europe, and the abandonment of unprofitable 5G use cases in China). See also *Brazil to reschedule auction for unsold 5G spectrum, minister says*, Reuters, 5 Nov. 2021, ("The minister and Anatel official Abraao Albino said the 26GHz spectrum did not attract interest due to uncertainties in the business model."), available at <https://www.reuters.com/business/media-telecom/brazil-reschedule-auction-unsold-5g-spectrum-minister-says-2021-11-05/>.

⁵ See IBDF Comments.