

REFERENCE

- [1] S. Hidayat, T. Ramdani, I. F. Alam, S. Sfenrianto, and E. R. Kaburuan, "The Role of High Throughput Satellite as Sky Highway Infrastructure to Support the Acceleration of Internet Entry into Villages in Indonesia," *International Journal of Mechanical Engineering and Technology (IJMET)*, vol. 10, no. 3, pp. 1447–1455, 2019.
- [2] B. Maruddani, E. Sandi, and W. Dara, "Study of Nusantara Satu Satellite Parameter Evaluation for Broadband Application in Indonesia," in *Journal of Physics: Conference Series*, IOP Publishing Ltd, Dec. 2019.
- [3] Dani Indra Widjanarko and Dadang Gunawan, "A Hybrid C/Ku-band High Throughput Satellite Systems as An Optimal Design for Indonesia," *International Conference on Signals and Systems (ICSigSys)*, 2017.
- [4] T. Florian Falah, "Marketing Strategy of High Throughput Satellite Utilization for Indonesian Multifunctional Services in 3T Area," *Journal of Economics and Business UBS*, vol. 12, 2023.
- [5] APJII, "APJII Internet Survey 2024." Accessed: Feb. 07, 2025. [Online]. Available: <https://survei.apjii.or.id/>
- [6] M. Khammassi, A. Kammoun, and M. S. Alouini, "Precoding for High Throughput Satellite Communication Systems: A Survey," *IEEE Communications Surveys and Tutorials*, 2023.
- [7] Yacob Sapan Panggau and Muhamad Asvial, "Analysis of Satellite Broadband Access Implementation in Indonesia Using Costing Methodology," *International Conference on Control, Electronics, Renewable Energy and Communications (ICCEREC)*, 2018.
- [8] F. Rahmadian and D. Gunawan, "High Throughput Satellite for Indonesian Broadband Access: A Feasibility Study in PT. Telekomunikasi Indonesia," in *MECnIT 2020 - International Conference on Mechanical, Electronics, Computer, and Industrial Technology*, Institute of Electrical and Electronics Engineers Inc., Jun. 2020, pp. 243–249.
- [9] Erich Lutz, "Co-channel Interference in High-throughput Multibeam Satellite Systems," *IEEE ICC SAC - Satellite and Space Communication*, 2015.
- [10] Y. Guan, F. Geng, and J. H. Saleh, "Review of High Throughput Satellites: Market Disruptions, Affordability-Throughput Map, and the Cost per

- bit/second Decision Tree,” May 01, 2019, *Institute of Electrical and Electronics Engineers Inc.*
- [11] Z. Dong, L. Yi, P. Qin, Y. Zhou, C. Zhang, and K. Liu, “Quantification and Analysis of Carrier-to-Interference Ratio in High-Throughput Satellite Systems,” *Electronics*, vol. 12, no. 16, Aug. 2023.
- [12] G. Cocco, M. Angelone, and A. I. Pèrez-Neira, “Co-channel Interference Cancellation at the User Terminal in Multibeam Satellite Systems,” *International Journal of Satellite Communications and Networking*, Jan. 2015.
- [13] B. F. Beidas and R. I. Seshadri, “Advanced Receiver Strategy for Co-Channel Interference in Multibeam Satellite Systems,” in *2020 10th Advanced Satellite Multimedia Systems Conference and the 16th Signal Processing for Space Communications Workshop, ASMS/SPSC 2020*, Institute of Electrical and Electronics Engineers Inc., Oct. 2020.
- [14] Hector Fenech, *High-Throughput Satellites*. Artech House, 2021.
- [15] H. Fenech, S. Amos, A. Tomatis, and V. Soumholphakdy, “High Throughput Satellite Systems: an Analytical Approach,” *IEEE Trans Aerosp Electron Syst*, vol. 51, no. 1, Jan. 2015.
- [16] H. Fenech, A. Tomatis, S. Amos, V. Soumholphakdy, and J. L. Serrano Merino, “Eutelsat HTS Systems,” *International Journal of Satellite Communications and Networking*, vol. 34, no. 4, Jul. 2016.
- [17] I. D. Kristiadi, M. I. Nashiruddin, and M. Sudjai, “High Throughput Satellite using Ka-Band for Government Multifunctional Services in Indonesia: Study of Link Budget and Capacity Analysis,” in *Proceeding - 2020 International Conference on Radar, Antenna, Microwave, Electronics and Telecommunications, ICRAMET 2020*, Institute of Electrical and Electronics Engineers Inc., Nov. 2020, pp. 85–90.
- [18] J. Louis J. Ippolito, *Satellite Communications Systems Engineering*, Second Edition. John Wiley & Sons Ltd, 2017.
- [19] T. Pratt and J. Allnutt, *Satellite Communications*, Third Edition. John Wiley & Sons Ltd, 2020.
- [20] L. J. Ippolito, *Satellite Communications Systems Engineering Atmospheric Effects, Satellite Link Design and System Performance*, First edition. John Wiley & Sons Ltd, 2008.

- [21] G. Maral, M. Bousquet, and Z. Sun, *Satellite Communications Systems: Systems, Techniques and Technology*, Sixth Edition. John Wiley & Sons Ltd, 2020.
- [22] ITU, “Recommendation ITU-R V.431-8 Nomenclature of the Frequency and Wavelength Bands Used in Telecommunications,” Geneva, 2015.
- [23] Neha Mehra, Abhishek Kakkar, and Subhash Chandra Bera, “System Design Aspects of Ka-Band High Throughput Satellite (HTS) for Indian Region,” *Twenty Fourth National Conference on Communications (NCC)*, 2018.
- [24] International Telecommunication Union (ITU), *Handbook on Satellite Communication (HSC)*, Third Edition. Wiley - Interscience.
- [25] D. Minoli, *Innovations in Satellite Communications and Satellite Technology: The Industry Implications of DVB-S2X, High Throughput Satellites, Ultra HD, M2M, and IP*, First Edition. John Wiley & Sons, Inc., 2015.
- [26] Y. Couble, C. Rosenberg, E. Chaput, J. B. Dupe, C. Baudoin, and A. L. Beylot, “Two-Color Scheme for a Multi-Beam Satellite Return Link: Impact of Interference Coordination,” *IEEE Journal on Selected Areas in Communications*, vol. 36, no. 5, pp. 993–1003, May 2018.
- [27] H. Fenech, L. Roux, A. Hirsch, and V. Soumholphakdy, “Satellite Antennas and Digital Payloads for Future Communication Satellites: The Quest for Efficiencies and Greater Flexibility,” *IEEE Antennas Propag Mag*, vol. 61, no. 5, Oct. 2019.
- [28] ITU, “Alternative Reference Radiation Pattern for Earth Station Antennas Used with Satellites in the Geostationary-Satellite Orbit for use in Coordination and/or Interference Assessment in the Frequency Range from 2 to 31 GHz S Series Fixed-Satellite Service,” 2010. [Online]. Available: <http://www.itu.int/ITU-R/go/patents/en>
- [29] ITU, “Satellite Antenna Radiation Pattern for Use as a Design Objective in the Fixed-Satellite Service Employing Geostationary Satellites,” 1997.
- [30] M. O. Kolawole, *Satellite Communication Engineering*. Marcel Dekker, Inc., 2002.
- [31] ITU, “Recommendation ITU-R P.525-3 Calculation of Free-space Attenuation P Series Radiowave Propagation.” [Online]. Available: <http://www.itu.int/ITU-R/go/patents/en>

- [32] ITU, "Recommendation ITU-R S.733-2 Determination of the G/T Ratio for Earth Stations Operating in the Fixed-Satellite Service," 2000.
- [33] D. Roddy, *Satellite Communications*, Fourth Edition. McGraw-Hill , 2006.
- [34] Radio Regulations, "International Telecommunication Union (ITU)," vol. I, 2020.
- [35] Kominfo, "Peraturan Menteri Komunikasi dan Informatika Republik Indonesia Nomor 7 Tahun 2021 tentang Penggunaan Spektrum Frekuensi Radio," 2021. [Online]. Available: www.peraturan.go.id
- [36] Kominfo, "Peraturan Menteri Komunikasi Dan Informatika Republik Indonesia Nomor 9 Tahun 2023 tentang Petunjuk Pelaksanaan Penetapan Tarif Atas Jenis Penerimaan Negara Bukan Pajak yang Berlaku pada Sektor Sumber Daya dan Perangkat Pos Dan Informatika," 2023.
- [37] SDPPI, "Simulasi BHP Frekuensi Radio ISR." Accessed: Jan. 06, 2025. [Online]. Available: https://www.postel.go.id/sdppi_maps/10-20200601-sdppi-maps-simulasi-bhp.php
- [38] O. Ben Yahia *et al.*, "Evolution of High-Throughput Satellite Systems: A Vision of Programmable Regenerative Payload," *IEEE Communications Surveys and Tutorials*, 2024.