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[11] C. Chrysanthou, H.L. Bertoni, "Variability of sector averaged signals for UHF propagation in cities", in IEEE Transactions on Vehicular Technology, Volume 39, Issue 4, pp. 352–358, November 1990.

[12] L.J. Greenstein, V. Erceg, Y.S. Yeh, M.V. Clark, "A new path-gain/delay-spread propagation model for digital cellular channels", in IEEE Transactions on Vehicular Technology, Volume 46, Issue 2, pp. 477–485, May 1997

[13] H.L. Bertoni, Radio Propagation for Modern Wireless Systems, (Upper Saddle River, NJ: Prentice-Hall Inc., 2000).

[14] P. Papazian, M. Cotton, "Relative Propagation Impairments Between 430 MHz and 5750 MHz for Mobile Communication Systems in Urban Environments", NTIA Report TR-04-407, December 2003.

[15] Y. Okumura, E. Ohmori, T. Kawano, K. Fukuda, "Field strength and its variability in VHF and UHF Land-Mobile radio service", in Review of the Electrical Communication Laboratory, Volume 16, No. 9-10, pp. 825–873, September-October 1968.

[16] M. Hata, "Empirical Formula for Propagation Loss in Land Mobile Radio Services", in IEEE Transactions on Vehicular Technology, Volume 29, No 3, pp. 317–325, August 1980.

[17] European Cooperation in the Field of Scientific and Technical Research, EURO-COST 231, "Urban Transmission Loss Models for Mobile Radio in the 900 and 1800 MHz Bands", COST 231 TD (91) 73. Rev 2, The Hague, September 1991.

[18] European Cooperation in the Field of Scientific and Technical Research, EURO-COST 231, "Digital Mobile Radio Towards Future Generation Systems", COST 231 Final report. [Online] http://www.lx.it.pt/cost231/.

[19] European Cooperation in the Field of Scientific and Technical Research, EURO-COST 259, European Co-operation in Mobile Radio Research, COST 259 Final Report, 2001. http://www.lx.it.pt/cost259/

[20] European Cooperation in the Field of Scientific and Technical Research, EURO-COST 273, Towards Mobile Broadband Multimedia Communications, COST 273 Final Report, 2006. (MIMO Channel Model available online: http://www.ftw.at/cost273)

[21] COST2100 project. [Online] www.cost2100.org

[22] F. Ikegami, S. Yoshida, T. Takeuchi, M. Umehira, "Propagation Factors Controlling Mean Field Strength on Urban Streets", in IEEE Transactions on Antennas & Propagation, Volume AP-32, pp. 822–829, 1984.

[23] J. Walfish, H.L. Bertoni, "A theoretical model of UHF propagation in urban environment, in IEEE Transactions on Antennas & Propagation, Volume AP- 36, pp. 1788–1796, December 1988.

[24] V. Erceg, L.J. Greenstein, S.Y. Tjandra, S.R. Parkoff, A. Gupta, B. Kulic, A.A. Julius, R. Bianchi, "An Empirically Based Path Loss Model for Wireless Channels in Suburban Environments", in IEEE Journal on Selected Areas in Communications, Volume 17, No. 7, July 1999.

[25] IEEE 802.16 Broadband Wireless Access Working Group, "Channel Models for Fixed Wireless Applications", contribution to 802.16a, 2003. [Online] http://wirelessman.org/tga/docs/80216a-03_01.pdf.

[26] IEEE 802.11-03/940r4, "TGn Channel Models", contribution to 802.11n, 2006.

[27] Y. Oda, R. Tsuchihashi, K. Tsunekawa, M. Hata, "Measured path loss and multipath propagation characteristics in UHF and microwave frequency bands for urban mobile communications" Vehicular Technology Conference, 2001. VTC 2001 Spring. IEEE VTS 53rd Volume 1, 6-9 May 2001 pp. 337-341 vol.1.

[28] T.-S. Chu and L.J. Greenstein, "A quantification of link budget differences between the cellular and PCS bands", in IEEE Transactions on Vehicular Technology, Volume 48, No. 1, pp. 60–65, January 1999.

[29] T.-S. Chu, L.J. Greenstein, "A Semi-Empirical Representation of Antenna Diversity Gain at Cellular and PCS Base Stations", in IEEE Trans. On Communications, Vol. 45, June 1997, pp. 644-646.

[30] A.G. Dimitriou, G.D. Seriadis, "Microcellular Propagation Prediction Model Based on a Geometric Progression Approximation-Process", in IEEE Trans. On Antennas and Propagation, Vol. 55, March 2007, pp. 969-977.

[31] R. Bultitude, T.Schenk, N. Op den Kamp, N. Adnani, "A Propagation-Measurement-Based Evaluation of Channel Characteristics and Models Pertinent to the Expansion of Mobile Radio Systems to Frequencies Beyond 2 GHz", in IEEE Trans. On Vehicular Technology, Vol. 52, March 2007, pp. 382-388.

[32] M.H. Hashim, S. Stavrou, "Measurements and modelling of wind influence on radiowave propagation through vegetation", in IEEE Transactions on Wireless Communications, Volume 5, Issue 5, pp. 1055–1064, May 2006.

[33] K. Benzair, "Measurements and modelling of propagation losses through vegetation at 1-4 GHz", in Antennas and Propagation, 1995. ICAP '95. Ninth International Conference on (Conf. Publ. No. 407) Volume 2, 4-7 April 1995 pp. 54-59 vol.2.

[34] J. Dalley, M. Smith, D. Adams, "Propagation losses due to foliage at various frequencies", in Proc. National Conf. on Antennas and Propagation, March-April 1999, Conf. Pub. No. 461.

[35] M.J. Gans, N. Amitay, Y.S. Yeh, T.C. Damen, R.A. Valenzuela, C. Cheon, J. Lee, "Propagation measurements for fixed wireless loops (FWL) in a suburban region with foliage and terrain blockages", in IEEE Transactions on Wireless Communications, Volume 1, Issue 2, pp. 302–310, April 2002.

[36] F. Wang, K. Sarabandi, "A Physics-Based Statistical Model for Wave Propagation Through Foliage", in IEEE Transactions on Antennas and Propagation, Vol. 55, pp. 958–968, March 2007.

[37] S.A. Torrico, R.H. Lang, "A Simplified Analytical Model to Predict the Specific Attenuation of a Tree Canopy", IEEE Transactions on Vehicular Technology, Vol. 56, pp. 699-703, March 2007.

[38] S. Aguirre, L.H. Loew, and L. Yeh, "Radio Propagation into Buildings at 912, 1920, and 5990 MHz Using Microcells", in Proc. 3rd IEEE ICUPC, pp. 129–134, October 1994.

[39] P.I. Wells, "The attenuation of UHF radio signals by houses", in IEEE Transactions on Vehicular Technology, Vol. 26, Issue 4, Nov 1977. pp. 358–362.

[40] E.F.T. Martijn, M.H.A.J. Herben, "Characterization of radio wave propagation into buildings at 1800 MHz", in Antennas and Wireless Propagation Letters, Volume 2, Issue 1, pp. 122–125, 2003.

[41] C. Oestges, A.J. Paulraj, "Propagation into buildings for broad-band wireless access", in IEEE Transactions on Vehicular Technology, Volume 53, Issue 2, pp. 521–526, March 2004.
[42] L.H. Loew, Y. Lo, M.G. Laflin, E.E. Pol, "Building Penetration Measurements From Low-height Base Stations At 912, 1920, and 5990 MHz", NTIA Report 95-325, September 1995.

[43] Ata, O.W., "In-building penetration loss modeling and measurement in suburban, urban and dense urban morphologies", in Antennas and Propagation Society International Symposium, 2005 IEEE, 3-8 July 2005, pp. 779–782, Vol. 1A

[44] H. Okamoto, K. Kitao, S. Ichitsubo, "Outdoor-to-indoor propagation loss prediction in 800-MHz to 8-GHz band for an urban area", In IEEE Transactions on Vehicular Technology, v 58, n 3, pp. 1059–1067, 2009.

[45] Y.P. Zhang, Y. Hwang, "Measurements of the characteristics of indoor penetration loss", in VTC 1994. 'Creating Tomorrow's Mobile Systems'. 1994 IEEE 44th Vehicular Technology Conference, pp. 1741–1744 vol.3, 1994.

[46] A. Davidson, C. Hill, "Measurement of building penetration into medium buildings at 900 and 1500 MHz", IEEE Transactions on Vehicular Technology, Volume 46, Issue 1, Feb. 1997 pp. 161–168.

[47] A.F. de Toledo, A.M.D. Turkmani, J.D. Parsons, "Estimating coverage of radio transmission into and within buildings at 900, 1800, and 2300 MHz", in IEEE Personal Communications, vol. 5, no. 2, April 1998 pp. 40–47.

[48] W. J. Tanis and G. J. Pilato, "Building penetration characteristics of 880 MHz and 1922 MHz radio waves", in IEEE Veh. Technol. Conf. Proc., 1993, pp. 206–209.

[49] R. Hoppe, G. Wolfle, F.M. Landstorfer, "Measurement of building penetration loss and propagation models for radio transmission into buildings", in Vehicular Technology Conference, 1999. VTC 1999 - Fall. IEEE VTS 50th, Volume 4, 19-22 Sept. 1999, pp. :2298 - 2302, vol.4.

[50] Gahleitner, R.; Bonek, E.; Radio wave penetration into urban buildings in small cells and microcells Vehicular Technology Conference, 1994 IEEE 44th 8-10 June 1994 Page(s):887 - 891 vol.2

[51] J.-E. Berg, "Building penetration loss along urban street microcells", in Seventh IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, 1996, PIMRC'96., Volume 3, 15-18 Oct. 1996 pp. 795–797 vol.3.

[52] A.M.D. Turkmani, J.D. Parsons, Feng Ju, D.G. Lewis, ""Microcellular radio measurements at 900, 1500 and 1800 MHz", Fifth International Conference on Mobile Radio and Personal Communications, 11-14 Dec 1989 pp. 65–68.

[53] C. Hill, T. Kneisel, "Portable Radio Antenna Performance in the 150, 450, 800, and 900 MHz Bands Outside and In-Vehicle", in IEEE Transactions on Vehicular Technology, Volume 40, Issue 4, pp. 750–756, November 1991.

[54] I. Kostanic, C. Hall, J. McCarthy, "Measurements of the Vehicle Penetration Loss Characteristics at 800MHz", IEEE Vehicular Technology Conference, VTC 98, Ottawa, May 1998.

[55] E. Tanghe, W. Joseph, L. Verloock, L. Martens, "Evaluation of Vehicle Penetration Loss at Wireless Communication Frequencies", in IEEE Transactions on Vehicular Technology, Volume 57, Issue 4, pp. 2036–2041, July 2008.

[56] S.Y. Seidel, "Path loss, scattering and multipath delay statistics in four European cities for digital cellular and microcellular radiotelephone", in IEEE Transactions on Vehicular Technology, Volume 40, Issue 4, pp. 721–730, November 1991.

[57] M.J. Feuerstein, K.L. Blackard, T.S. Rappaport, S.Y. Seidel, H.H. Xia, "Path loss, Delay Spread, and Outage Models as Functions of Antenna Height for Microcellular System", in IEEE Transactions on Vehicular Technology, Vol. 43, No 3, pp. 487-498, August 1994.

[58] V.S. Abhayawardhana, I.J. Wassell, D. Crosby, M.P. Sellars, and M.G. Brown, "Comparison of empirical propagation path loss models for fixed wireless access systems", in Vehicular Technology Conference, Spring 2005, Volume 1, pp. 73–77, 30 May – 1 June 2005.

[59] G.D. Durgin, T.S. Rappaport, and H. Xu, "Measurements and Models for Radio Path Loss In and Around Homes and Trees at 5.85 GHz", in IEEE Transactions on Communications, Volume 46, No 11, pp. 1484–1496, November 1998.

[60] J.W. Porter, I. Lisica, G. Buchwald, "Wideband mobile propagation measurements at 3.7 GHz in an urban environment", in IEEE Antennas and Propagation Society International Symposium, Volume 4, pp. 3645–3648, 20-25 June 2004.

[61] T. Rautiainen, K. Kalliola, J. Juntunen, "Wideband radio propagation characteristics at 5.3 GHz in suburban environments", in Proc. IEEE 16th International Symposium on Personal, Indoor and Mobile Radio Communications, 2005, PIMRC 2005, Volume 2, pp. 868–872, 11–14 September.

[62] T. Schwengler, M. Gilbert, "Propagation models at 5.8 GHz – path loss and building penetration", in Proc. 2000 IEEE Radio and Wireless Conference, pp. 119–124, 10–13 September 2000.

[63] W. Jakes, Microwave Mobile Communications, (New York: IEEE, 1974. Reedited Piscataway: IEEE Press, 1993), pp. 125-127.

[64] M.K. Simon, M.-S. Alouini, Digital Communications over Fading Channels, New York: John Wiley & Sons, 2000, ch. 2.

[65] N.L. Johnson, S. Kotz, N. Balakrishnan, Continuous Univariate Distributions, Volume 1, 2nd ed. (New York: John Wiley & Sons, 1994), ch. 17.

[66] G. Tzeremes, C.G. Christodoulou, "Use of Weibull distribution for describing outdoor multipath fading", in IEEE Antennas and Propagation Society, AP-S International Symposium (Digest), v. 1, 2002, pp. 232-235.

[67] J. Wang, T.S. Ng, Ed. Advances in 3G Enhanced Technologies for Wireless Communications, (Artech House, 2002).