# 3G, HSDPA, HSUPA and FDD Versus TDD Networking: Smart Antennas and Adaptive Modulation

by

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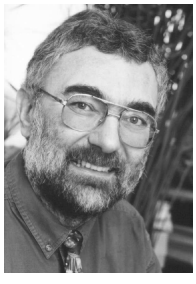

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# Contents

# Glossary

| | |
|---|---|
| **AWGN** | Additive White Gaussian Noise |
| **BS** | A common abbreviation for Base Station |
| **CDMA** | Code Division Multiple Access |
| **CMA** | Constant Modulus Algorithm |
| **DCS1800** | A digital mobile radio system standard, based on GSM, but operates at 1.8GHz at a lower power. |
| **DOA** | Direction Of Arrival |
| **FDD** | Frequency Division Duplex |
| **GSM** | A Pan-European digital mobile radio standard, operating at 900MHz. |
| **HIPERLAN** | High Performance Radio Local Area Network |
| **IF** | Intermediate Frequency |
| **LMS** | Least Mean Square, a stochastic gradient algorithm used in adapting coefficients of a system |
| **MS** | A common abbreviation for Mobile Station |
| **MSE** | Mean Square Error, a criterion used to optimised the coefficients of a system such that the noise contained in the received signal is minimised. |
| **PDF** | Probability Density Function |
| **RF** | Radio Frequency |
| **RLS** | Recursive Least Square |
| **SDMA** | Spatial Division Multiple Access |
| **SINR** | Signal to Interference plus Noise ratio, same as signal to noise ratio (SNR) when there is no interference. |
| **SIR** | Signal to Interference ratio |
| **SNR** | Signal to Noise Ratio, noise energy compared to the signal energy |
| **TDD** | Time Division Duplex |
| **TDMA** | Time Division Multiple Access |
| **UMTS** | Universal Mobile Telecommunication System |

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