

# **Decision Feedback Equalisation Of Coded I-Q QPSK In Mobile Radioenvironments**

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## **Summary**

The bit error rate (BER) performance of equalised I-Q quadrature phase-shift keying (QPSK) is evaluated for wideband cellular systems. Decision feedback equalisation with the square-root Kalman updating algorithm is employed for I-Q coded systems. A gain of about 6 dB is achieved in favour of the I-Q scheme compared with the conventional Gray-mapped QPSK at a BER of  $10^{-3}$

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