

The animation of the spectral efficiency of A2A link

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Outline

- 1 Parameters used in characterizing the air-to-air link
- 2 Adaptive coding and modulation
- 3 The animation of the links' spectral efficiency for Australia scenario

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Parameters

| | |
|--------------------------------------|---------------|
| Carrier frequency f_c | 2100 MHz |
| Bandwidth B | 15 MHz |
| Symbol duration T_s | 66.67 μ s |
| Number of subcarrier N_c | 900 |
| Subcarrier spacing F_s | 15 kHz |
| Maximum Doppler shift $f_{D_{\max}}$ | 7.3 KHz |
| Maximum delay τ_{\max} | 66 μ s |
| Rician factor K_{Rice} | 15 dB |
| Transmit power P_t | 43 dBm |
| Number of echos N | 20 |

Table 1: LTE-based Parameters used in characterizing the air-to-air link

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Adaptive coding and modulation

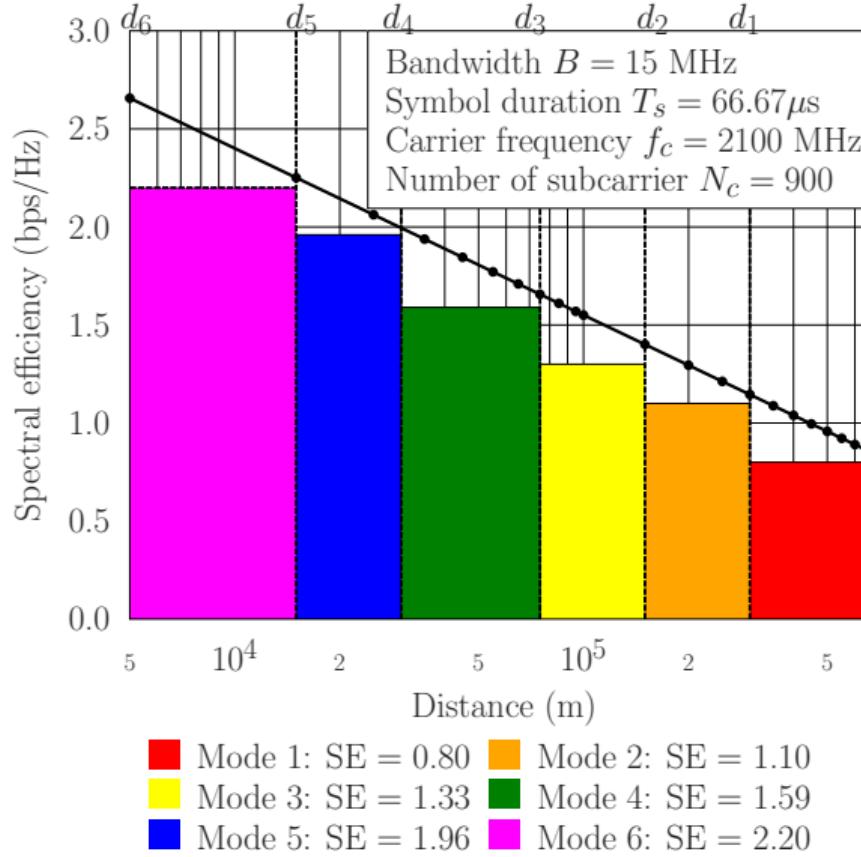


Figure 1: The designed 6 modes ACM

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Simulation results