

# Operation in an Interference Limited Environment

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- **This submission addresses the issue of high capacity system applications.**
- **In such applications, cellular and microcellular systems, for instance, become interference limited.**
- **With increased demand for capacity, cell subdivision occurs which increases the propensity for interference limited operation.**
- **In interference limited operation, there is such prevalent reuse of frequencies that in hours of peak use there is frequently a low level signal present on all or many frequencies or channels.**

- For WLANs, a three dimensional office building will provide the scenario for interference limited operation.
- This paper suggest that the Mac State Machine be amended to allow IEEE 802.11 systems to operate efficiently in an interference limited environment.

## Illustration of Interference Limited Operation

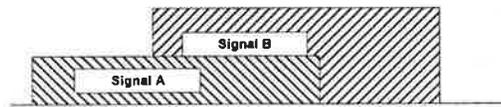


Figure #1

**Signal A is undesired**  
**Signal B is desired**  
**It is important that Signal B be receivable**

- **Motion:**
- **The Mac State Machine provide the option for a receiving station to reject an incoming compliant IEEE 802.11 transmission as soon as the receiving station determines that the packet is not intended for the station it. Once rejected, the station would be free to receive another signal even if that signal begins before the scheduled end of the rejected signal.**

- **Straw vote to support the idea of addressing the interference limited issue**

