



**\*\*To:\*\*** Senior Network Planners  
**\*\*From:\*\*** Network Performance Analysis Team  
**\*\*Subject:\*\*** WAN Link Performance Report & Recommendation

**\*\*Location:\*\*** CSK - Tanishq store, Kolkata  
**\*\*Vendor / Link Type:\*\*** AIRTEL / DBB  
**\*\*Business Hours:\*\*** 09:00–18:00  
**\*\*Provisioned Speed:\*\*** 500.0 Mbps

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### ### 1. Usage Pattern Analysis

The 500 Mbps link is significantly underutilized, with average usage below 1% of its total capacity. While traffic is higher during business hours, absolute usage remains very low. The data reveals a single, isolated one-minute peak that consumed 95% of the bandwidth (474 Mbps). This indicates a rare, high-volume data burst, such as a large file transfer or backup, rather than consistent high demand. For 99% of the time, usage remains below 8.22 Mbps.

### ### 2. Capacity Planning Recommendations

The link is heavily over-provisioned for its demonstrated needs, leading to unnecessary operational costs. Based on sustained usage patterns, we recommend right-sizing the circuit.

\* **\*\*Conservative Plan:\*\*** 2.7 Mbps  
\* **\*\*Balanced Plan:\*\*** 3 Mbps  
\* **\*\*Aggressive Plan:\*\*** 522 Mbps (Retain for rare peaks)

We suggest adopting the **\*\*Balanced 3 Mbps\*\*** plan, which comfortably covers all typical usage with a buffer for growth.

### ### 3. Performance Risks & Bottlenecks

There is no current risk of network congestion or performance degradation. The brief high-usage spike did not exceed the provisioned limit. The primary risk associated with this link is financial inefficiency due to the severe mismatch between provisioned capacity and actual consumption.

### ### Conclusion

The link should be downgraded to a 3-5 Mbps plan to align capacity with actual usage, which will generate significant cost savings while still accommodating typical demand.

## Visual Insights

