



**\*\*To\*\*:** Senior Network Planners

**\*\*Subject\*\*:** WAN Link Performance & Capacity Report - Sikkim Watches Factory

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- **\*\*Location\*\*:** Sikkim Watches Factory, Sikkim  
- **\*\*Vendor\*\*:** JIO  
- **\*\*Link Type\*\*:** ILL  
- **\*\*Business Hours\*\*:** 09:00–18:00  
- **\*\*Provisioned Speed\*\*:** 30.0 Mbps  
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### ### \*\*1. Usage Pattern Analysis\*\*

The 30 Mbps link is heavily utilized during business hours, with usage regularly spiking to and beyond its provisioned capacity. While the overall average usage is moderate (11.76 Mbps), frequent demand peaks saturate the connection, indicating a recurring pattern of high-intensity activity. An extreme peak of over 3.5 Gbps was recorded, which is a significant anomaly that should be investigated for a potential network misconfiguration or security event.

### ### \*\*2. Capacity Planning Recommendations\*\*

The circuit is currently under-provisioned for its actual demand. The sustained daily peak average is 34.68 Mbps, already exceeding the provisioned speed. Factoring in the aggressive monthly growth rate of 25.44%, an upgrade to a 50 Mbps link is recommended to provide necessary headroom and prevent future performance degradation.

### ### \*\*3. Performance Risks & Bottlenecks\*\*

The primary risk is consistent network congestion. The link operated above 90% capacity for over 108 hours, directly impacting application performance and user experience. These frequent bursts create a critical bottleneck, leading to packet loss and high latency. The link is non-compliant with performance SLAs for a significant portion of the time (14.54%).

### ### \*\*Conclusion\*\*

An immediate upgrade to a 50 Mbps circuit is critical to mitigate ongoing performance degradation and support projected business growth.

## Visual Insights

