

3.3 Local Area Subnetwork Requirements

- a. The minimum SIGNET local area subnetwork service level will support a data link layer aggregate throughput of approximately 3.5 Mbit/s continuous and 6 Mbit/s peak. The SIGNET local area subnetwork traffic requirement is less than 2.0 Mbit/s continuous.
- b. The minimum service level supports a data link layer round trip response time of less than 1ms.

3.4 Inter-Regional Link Bandwidth Recommendations (PRELIMINARY)

- a. Table 3.5 summarizes the recommended inter-regional node bandwidth requirements. The reader is referred to Appendix I for details.

<u>Link</u>	<u>Bandwidth (kbits/s)</u>	<u>DS-0s</u>
London - Ottawa	256	4
Paris - Ottawa	192	3
Paris - London	192	3
San Francisco - Ottawa	256	4
Washington - Ottawa	128	2
New York - Ottawa	64	1

Table 3.5: Inter Regional Node SIGNET Bandwidth

NOTE: PRELIMINARY VIEW

- b. The consolidation of mission traffic on the regional links primarily serves the purpose of maximizing bandwidth efficiency. In the cases of Paris, Washington, and London, a further benefit is realized by providing the larger missions with greater bandwidth than otherwise would be afforded.
- c. A limitation on consolidating the bandwidth is that the point of consolidation requires a router unless a frame relay service is provided on MITNet. In the case of San Francisco, there is currently no qualified staff on site. MITNet operations for the Pacific Rim is handled out of Ottawa.
- d. The use of a frame relay service within the wide area subnetwork, which will readily enable the consolidation of bandwidth, is to be evaluated in conjunction with MITNET personnel.