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August 7, 2002

To whom it may concern:

IBM support of the Lucent Technologies Metro Enhanced Optical Network (EON)[™] System

This letter is provided pursuant to Attachment D: GDPS Testing of the Data Mirror Testing of Lucent Technologies' METROPOLIS EO Statement of Work LUT01-017, dated January 21, 2002, between International Business Machines Corporation and Lucent Technologies, Inc.

IBM and Lucent Technologies have completed joint qualification testing of the Lucent Technologies Metro EON[™] System in the following IBM eServer Parallel Sysplex / GDPS[™] environments:

- IBM Parallel Sysplex[®] and Geographically Dispersed Parallel Sysplex[™] (GDPS) including both "Peer-to-Peer Remote Copy" (PPRC) synchronous copy solutions and "Extended Remote Copy" (XRC) asynchronous copy solutions, using the IBM 9037 Sysplex Timer[®] ETR and CLO links, HiPerLink (ISC)^{*}, and ISC-3 configured in both compatibility and peer mode.
- FICON[™] (Single Mode)
- ESCON[®]
- Gigabit Ethernet (Single Mode)

Test Results Summary:

The Lucent Metro EON[™] met qualification test criteria in the GDPS / PPRC environment for up to the maximum supported PPRC application distance of 40 km and in the GDPS/XRC/FICON environment, for up to the maximum supported FICON application distance of 100km. The Lucent Metro EON[™], utilizing Lucent optical amplifiers, also met functional test criteria for the GDPS / XRC / FICON environment at distances up to 150 km. However, FICON performance may show some degradation in applications at distances beyond 100 km.

Restriction: Metro EON Rel. 8.2.1 link provisioning is restricted to dedicated unprotected links in Parallel Sysplex / GDPS applications using HiPerLinks, ISC-2, ISC3 and Sysplex timer (ETR and CLO) interface protocols. The Metro EON implements software lockout to inhibit provisioning these links in Protected N+1 mode. Specific hardware and software products used during the testing are defined below.

The Metro EON Software Release level used during the testing is 8.2.1, control date, July 15, 2002. The Lucent LEA307 was used in networks requiring optical amplification. Hardware levels used in supporting specific protocols are listed in the following table:

ESCON	UBB Circuit Packs: Add OTPM 47Ax and 47AxB. Drop OTPM 47B ELSBB Circuit Packs: Add OTPM 44Cx, Drop OTPM 44BC LSBB Circuit Packs: Add OTPM 44A8B, Drop OTPM 44B
FICON (Single Mode)	UBB Circuit Packs: Add OTPM 47Ax, Drop OTPM 47B
ISC HiPerLink (ISC-2)	ELSBB Circuit Packs: Add OTPM 44Cx, Drop OTPM 44BC
ISC-3 Compatibility Mode	ELSBB Circuit Packs: Add OTPM 44Cx, Drop OTPM 44BC
ISC-3 Peer Mode	UBB Circuit Packs: Add OTPM 47Ax, Drop OTPM 47B
ETR	ELSBB Circuit Packs: Add OTPM 44Cx, Drop OTPM 44BC
CLO	UBB Circuit Packs: Add OTPM 47Ax, Drop OTPM 47B
Gigabit Ethernet	UBB Circuit Packs: Add OTPM 47Ax, Drop OTPM 47B

Lucent Metro EON compliance to product specifications, safety, regulatory agencies, industry standards and truth in advertising is the sole responsibility of Lucent Technologies.

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