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To whom it may concern:

IBM GDPS Application support of the Cisco ONS 15530 DWDM and Cisco ONS 15540 (ESP) Extended Services Platform

This letter is provided pursuant to the ONS 15530 DWDM "Joint Testing Project Statement" attachment to the "Joint Testing and Communication Agreement No.CISC009-001, effective May 1, 2002, between International Business Machines Corporation and Cisco Systems. IBM and Cisco Systems have completed application qualification testing of the Cisco ONS 15530 DWDM and Cisco ONS 15540 ESP (Extended Services Platform) in the following IBM Parallel Sysplex / GDPS™ S/390 and zSeries eServer 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™ (1 Gbps.) Single mode / Multimode fiber
- FICON Express™ (2 Gbps.) Single mode / Multimode fiber
- ESCON® (Multimode)
- ISC-3 S/390 and zSeries "Compatibility Mode" 1 Gbps. (Single Mode fiber)
- ISC-3 zSeries "Peer Mode" 2 Gbps. (Single Mode fiber)

Test Results Summary:
  The Cisco ONS 15530 DWDM, Cisco ONS 15540 ESP and Cisco 15540 ESPx met IBM GDPS Qualification criteria for the following IBM application solution environments:

- GDPS™/ PPRC / ESCON up to the maximum Sysplex Timer® application distance of 40 km
- GDPS™ / XRC / FICON up to the maximum supported application distance of 100km
- All IBM protocol requirements of the Parallel Sysplex / GDPS™ S/390 and zSeries eServer environments

Cisco ONS 15216 (EDFA) and Cisco ONS 15501 (EDFA) optical amplifiers were used during testing to meet link budget requirements for extended distance applications. Specific Cisco product hardware and software release levels used during the testing are follows:

- Cisco ONS 15540 ESP, SW Release IOS 12.1.13E1
- Cisco ONS 15540 ESPx, SW Release IOS 12.1.13E1
- Cisco ONS 15530 DWDM Multiservice Aggregation Platform, SW Release IOS 12.1.10-EV4

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