STATE OF MARYLAND
MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING (the “MOU”) is made as of the 7th day of February, 2003 by and between the DEPARTMENT OF BUDGET AND MANAGEMENT (“Department”), a principal department of the State of Maryland (the “State”), and University System of Maryland (“USM”) whose address is 3300 Metzerott Road, Adelphi, Maryland 20783.

WHEREAS The Department has a core Dense Wave Division Multiplex (DWDM) fiber infrastructure between Baltimore, Maryland and College Park, Maryland as part of its state wide high-speed backbone known as networkMaryland.

WHEREAS The University System of Maryland (USM) requests an OC48 individual optical wavelength, known as a LAMBDA, interface from 6 St. Paul, Baltimore and University of Maryland, Building 224, College Park. This connection will be referred to as the Baltimore MetaPoP.

WHEREAS Internet2 is a consortium being led by 200 universities working in partnership with industry and government to develop and deploy advanced network applications and technologies, accelerating the creation of tomorrow's Internet.

WHEREAS Abilene is an advanced backbone network that supports the development and deployment of the new applications being developed within the Internet2 community. Abilene connects regional network aggregation points, called gigaPoPs, to support the work of Internet2 universities as they develop advanced Internet applications. Abilene complements other high-performance research networks.

WHEREAS The Baltimore MetaPoP will connect to Internet2 and the Abilene network through the Mid Atlantic Crossroads (MAX). MAX is currently supported out of the University of Maryland facility located in Building 224 on the Collage Park campus.

WHEREAS research and education entities in the Baltimore area require high-speed access for the qualified Baltimore Internet2 community to the Internet2 PoP located at College Park.

The parties agree as follows:

1. Services to be Provided

   (a) The Department shall provide the following services:

   i. Allocate to the USM a separate OC48 lambda on the same networkMaryland fiber that is in production between the 6 St. Paul location and College Park.

   ii. Pass the fiber from the networkMaryland DWDM interface located at 6 St. Paul Street, Baltimore to USM’s gigabit Ethernet switch located at University of Maryland, Building 224, College Park, Maryland.

   iii. Provide one seven-foot rack with AC power and fiber panel for collocating equipment in the 6 St. Paul Collocation Room.

   iv. Provide 24/7/365 access to equipment in 6 St. Paul Collocation Room.

   v. Provide necessary building fiber for the connection of USM customers, not to exceed 50 terminations, into the networkMaryland PoP located at 6 St. Paul and associated labor.
(b) **The USM shall provide the following:**

i. Provide a Gigabit Ethernet switch, and an uninterruptible power supply in a separate cabinet, or in an area designated by the Department for the 6 St. Paul location.

ii. Maintain the Internet2 interface connection.

iii. Provide cost effective and state-of-the-art next generation network services to qualifying Baltimore MetaPOP Internet2 institutions as well as to other Baltimore research and educational organizations. The USM shall be limited to providing services to 50 or fewer customers connections into the networkMaryland POP.

iv. Assure that all traffic related to Internet2 will utilize the TCP/IP protocol.

v. Assure that the size and traffic mix on the Internet2 network will in no way interfere with traffic on networkMaryland.

vi. Isolate Internet-2 traffic from general networkMaryland traffic.

vii. Provide and maintain a Single mode, SC termination, fiber patch panel in the College Park PoP for connectivity between networkMaryland equipment and USM equipment in adjacent room.

viii. Management of this Ethernet switch will be the responsibility of the USM.

ix. Provide coordination between all customers and the Department for all customer connections and disconnections in the 6 St. Paul location with a minimum of 30 days written notice to ensure proper engineering, documentation and fiber resource availability.

x. Provide the Ciena OC48 transceiver cards (three required) and installation services to facilitate the new lambda. The USM shall provide parts and on-site service for a period of two years from the date of purchase.

xi. Provide ongoing manufacturer’s maintenance agreements on three Ciena OC48 transceiver cards.

xii. USM shall not store any non-networkMaryland materials at the collocation site at 9 St. Paul St.

(c) **Changes.** This MOU may be amended only with the written consent of both parties. Amendments may not change significantly the scope of the MOU (including the price).

2. **Term of MOU.** This Agreement shall begin on February 7, 2003 and end on February 7, 2008 unless otherwise agreed by the parties.

3. **Compensation and Method of Payment.**

   (a) **Compensation:** USM shall pay the Department a one time fee per customer of $1000.00 to cover the cost of engineering and documentation of fiber resources and/or associated labor when connecting to the 6 St. Paul PoP. USM shall notify the Department in writing each time a customer is added. The notice shall be given within 30 days before the addition of the Customer.

   (b) **Method of Payment.** USM shall pay the Department no later than thirty days after USM receives a proper invoice from the Department.
3. **Program Officer.** Department designates Mary Ann Slack (410-260-6126) to serve as Program Officer for this MOU. All contact between Department and USM regarding all matters relative to this MOU shall be coordinated through the Program Officer.

4. **Termination for Convenience.** Either party may terminate this MOU, in whole or in part, without showing cause upon 6-month prior written notification to the other party specifying the extent and the effective date of the termination. The terminating party will pay all reasonable costs associated with this MOU that the other party has incurred up to the date of termination, and all reasonable costs associated with termination of the MOU. However, the USM may not be reimbursed for any anticipatory profits, which have not been earned up to the date of termination. Termination hereunder, including the determination of the rights and obligations of the parties, shall be governed by the provisions of COMAR 21.07.01.12(A)(2).

5. **Termination for Default.** If USM does not fulfill obligations under this MOU or violates any provision of this MOU, Department may terminate the MOU by giving the USM written notice of termination. Termination under this paragraph does not relieve the USM from liability for any damages caused to the State. Termination hereunder, including the rights and obligations of the parties, shall be governed by the provisions of COMAR 21.07.01.11B.

6. **Termination for Non-appropriation.** If funds are not appropriated or otherwise made available to support continuation on the network Maryland system in any fiscal year succeeding the first fiscal year, this MOU shall be terminated automatically as of the beginning of the fiscal year for which funds are not available.

7. **Maryland Law Prevails.** The law of Maryland shall govern the interpretation and enforcement of this MOU.

IN WITNESS WHEREOF, the parties have executed this MOU.

FOR THE AGENCY/UNIVERSITY

**DEPARTMENT OF BUDGET AND MANAGEMENT**

By: ______________________________ (SEAL)  
Dr. William B. Kirwan  
Name Printed or Typed  
Chancellor, University System of Maryland  
Title

By: ______________________________ (SEAL)  
James C. DiPaula  
Name Printed or Typed  
Secretary of Budget and Management  
Title