CONTRACT MODIFICATION AGREEMENT

Date: December 2, 2016

Contract No.: TS-014-07

Modification No.: 1

Issued By: Virginia Polytechnic Institute and State University (Virginia Tech)

Contractor: Level3 Communications

Commodity: Internet Provider Services / Internet Telephony Services

This Supplemental Agreement is entered into pursuant to the provisions of the basic contract.

I. Description of Modification:

A. Add To Contract:

Voice Complete services as described in Level 3 quote #4582739, deal #3804857

Proposed Service

United States Telephone Numbers (19,000 @ $0.07)  TCO Quote
Mobility Feature Pack (150 @ $0.50)  75.00
Feature Pack 2 (150 @ $0.50)  75.00
CCP Plan 1 (600 @ $12)  7,200.00
Prepaid Minute Plan 2 - 500,000 Prepaid Minutes ($4,800)  4,800.00

B. Delete From Contract:

SIP Trunking DID Block QTY = 950  2,847.00
SIP Trunking Mobility Feature Pack  95.00
SIP Trunking Feature Pack 1  0.00
SIP Trunking CCP Flat Local  13,200.00

C. Other:

For conversion of services under current Quilt MSA Quilt with Level 3. (TS-014-07).

II. REASON FOR MODIFICATION:

To convert our Level-3 SIP trunking services from the legacy EIPT service to the current generation Voice Complete services, resulting in an estimated monthly recurring savings of $2,662.
Except as provided herein, all terms and conditions of Contract Number TS-014-07, as heretofore changed, remain unchanged and in full force and effect.

Contractor
By: 
(Signature)
Dwight E. Steiner
Vice President &
Asst. General Counsel

Virginia Tech
By: 
Mary W. Helmick
Director of Procurement
July 26, 2016

Level 3 Communications, LLC
Attn: Joseph Dinelli
1025 Eldorado Blvd
Broomfield, CO, 80021-8254

Dear Joseph Dinelli:

Subject: Virginia Tech Contract #UCP-TS-014-07
Commodity/Service: Internet Provider Services

Thank you for responding to my letter of June 30, 2016 and agreeing to renew the contract. The contract will now expire July 31, 2017.

The attached form shows your company information as listed in the university's vendor database. If any of this information changes, please make corrections directly on the form, and return to me. It is essential that this information be accurate in order for payments to be processed in a timely manner.

We look forward to working with you for an additional year.

Sincerely,

Roger Gupta, CPPB, CUPO, VCO
Senior Buyer/Contracts Officer
Telephone: (540) 231-4177

RG/kjb

c: F.M. Pro
William Dougherty
VENDOR INFORMATION FORM

Level 3 Financing, Inc

FULL LEGAL NAME
(Company Name as it appears with your Federal Taxpayer Number)

FEDERAL TAXPAYER NUMBER

Level 3 Communications, LLC

BUSINESS NAME/ DBA NAME/TA NAME
(If different than Full Legal Name)

FEDERAL TAXPAYER NUMBER
(if different than ID# above)

Level 3 Communications, LLC

BILLING NAME
(Company name as it appears on your invoice)

FEDERAL TAXPAYER NUMBER
(if different than ID# above)

PURCHASE ORDER ADDRESS:

P O BOX ADDRESS 1
1025 Eldorado Blvd

STREET ADDRESS 2
Broomfield

CITY

CO
STATE
80021-8254
ZIP CODE

PAYMENT ADDRESS:

Department 182

PAYMENT P O BOX ADDRESS 1

PAYMENT STREET ADDRESS 2

Denver

CITY

CO
STATE
80291-0182
ZIP CODE

813-349-1424

CONTACT PERSON

PHONE NUMBER

Joseph Dinelli

TOLL FREE NUMBER

720-567-1198

EMAIL

FAX NUMBER
June 30, 2016

Level 3 Communications, LLC
Attn: Joseph Dinelli
1025 Eldorado Blvd
Broomfield, CO, 80021-8254

Dear Joseph Dinelli:

Subject: Virginia Tech Contract # UCP-414-07
Commodity/Service: Internet Provider Services

This is to inform you that the subject contract expires July 31, 2016. Since the university would like to renew the contract for an additional year, please advise concerning your intention by signing in the appropriate space listed below. A signed copy of this letter should be received by Procurement by July 14, 2016.

In addition, review the attached form, which shows your company information as listed in the university's vendor database. If any of this information has changed, make corrections directly on the form, and return with this letter. It is essential this information be accurate for payments to be processed in a timely manner.

Virginia Tech recommends that our vendors utilize the Wells One AP Control Payment System for payment of all invoices and strongly encourages all vendors under contract with the university to participate in this program. If your firm is not enrolled in the program, refer to our website: http://www.procurement.vt.edu/Vendor/WellsOne.html or contact me directly for more information.

Sincerely,

Roger Gupta, CPPB, CLPO, VCO
Buyer Senior/Contracts Officer
Telephone: (540)-231-4177

Level 3 Communications, LLC agrees to renew the contract for an additional year under the terms and conditions of the subject contract.

Authorized Signature: ________________________________ Date: July 26, 2016

Name: Dwight E. Steiner
Title: Vice President &
Asst. General Counsel

We currently participate in the Wells One Program. We would like to participate in the Wells One Program.

Level 3 Communications, LLC does not agree to renew the contract for an additional year.

Authorized Signature: ________________________________ Date: ________________

Name: ________________________________ Title: ________________________________

Approved: ________________________________

Date: 7/26/16

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution
Level 3 Communications, LLC

FULL LEGAL NAME
(Company Name as it appears with your Federal Taxpayer Number)

Level 3 Communications, LLC

BUSINESS NAME/DBA NAME/TA NAME
(If different than Full Legal Name)

FULL LEGAL NAME
(Company Name as it appears with your Federal Taxpayer Number)

FEDERAL TAXPAYER NUMBER

FEDERAL TAXPAYER NUMBER
(If different than ID# above)

BILLING NAME
(Company name as it appears on your invoice)

PAYMENT ADDRESS:

P.O. BOX ADDRESS 1

1025 Eldorado Blvd

STREET ADDRESS 2

Broomfield
CITY

CO 80021-8254
STATE ZIP CODE

Joseph Dinelli
CONTACT PERSON

PAYMENT P.O. BOX ADDRESS 1

PAYMENT STREET ADDRESS 2

Denver
CITY

CO 80291-0182
STATE ZIP CODE

813-349-1424
PHONE NUMBER

TOLL FREE NUMBER

720-567-1196
FAX NUMBER
July 22, 2015

Joseph Dinelli
Level 3 Communications LLC
1025 Eldorado Blvd
Broomfield CO 80021-8254

Dear Mr. Dinelli:

Subject: Virginia Tech Contract # UCP-TS-014-07
Commodity/Service: Internet Provider Services

Thank you for responding to my letter of April 2, 2015 and agreeing to renew the contract for an additional year. The contract will now expire July 31, 2016.

The attached form shows your company information as listed in the university's vendor database. If any of this information changes, please make corrections directly on the form, and return to me. It is essential that this information be accurate in order for payments to be processed in a timely manner.

We look forward to working with you for an additional year.

Sincerely,

Roger K. Gupta, CPPB, CUPO, VCO
Buyer Senior/Contracts Officer
Telephone: (540) 231-4177

RG/tdj

c: F.M. Pro
William Dougherty, Joe Hutson, Pat Rodgers
Level 3 Communications, LLC

FULL LEGAL NAME
(Company Name as it appears with your Federal Taxpayer Number)

Level 3 Communications, LLC

BUSINESS NAME/DBA NAME/TA NAME
(If different than Full Legal Name)

FEDERAL TAXPAYER NUMBER
(If different than ID# above)

FEDERAL TAXPAYER NUMBER
(If different than ID# above)

Level 3 Communications, LLC

BILLING NAME
(Company name as it appears on your invoice)

FEDERAL TAXPAYER NUMBER

FEDERAL TAXPAYER NUMBER

PURCHASE ORDER ADDRESS:

P O BOX ADDRESS 1
1025 Eldorado Blvd

STREET ADDRESS 2
Broomfield

CITY

CO
80021-8254

STATE
ZIP CODE

PAYMENT ADDRESS:

Department 182
PAYMENT P O BOX ADDRESS 1

PAYMENT STREET ADDRESS 2

Denver

CITY

CO
80291-0182

STATE
ZIP CODE

Joseph Dinelli

CONTACT PERSON

EMAIL

PHONE NUMBER

TOLL FREE NUMBER

813-349-1424

720-567-1198

FAX NUMBER
April 2, 2015

Level 3 Communications, LLC  
Attn: Joseph Dinelli  
1025 Eldorado Blvd  
Broomfield, CO 80021-8254

Dear Mr. Dinelli:

Subject: Virginia Tech Contract # UCP-TS-014-07  
Commodity/Service: Internet Provider Services

This is to inform you that the subject contract expires July 31, 2015. Since the university would like to renew the contract for an additional year, please advise concerning your intention by signing in the appropriate space listed below. Please return one signed copy of this letter to me by April 17, 2015.

Please review the attached form, which shows your company information as listed in the university's vendor database. If any of this information has changed, make corrections directly on the form, and return with this letter. It is essential that this information be accurate in order for payments to be processed in a timely manner.

Thank you for your attention to this matter.

Sincerely,

Roger Gupta  
Buyer Senior/Contracts Officer  
Telephone: (540) 231-4177

Level 3 Communications, LLC agrees to renew the contract for an additional year in accordance with the terms and conditions of the subject contract.

Authorized Signature: Dwight E. Steiner  
Name: Dwight E. Steiner  
(please print)  
Date: July 20, 2015  
Title: VP, Assistant General Counsel

Level 3 Communications, LLC does not agree to renew the contract for an additional year.

Authorized Signature:  
Name:  
(please print)  
Date:  
Title:  

RG/jv  
c: FMP

Approved:  
Patricia Mullins  
Assistant Director of Purchasing for Research Support  
Date: 7-22-2015
Level 3 Communications, LLC

FULL LEGAL NAME
(Company Name as it appears with your Federal Taxpayer Number)
(A disregarded entity for Federal Tax purposes)

Level 3 Financing, Inc.

PARENT BUSINESS NAME/ DBA NAME/TA NAME
(If different than Full Legal Name)

Level 3 Communications, LLC

BILLING NAME
(Company name as it appears on your invoice)

PURCHASE ORDER ADDRESS:

P O BOX ADDRESS 1
1025 Eldorado Blvd

STREET ADDRESS 2
Broomfield

CITY
CO 80021-8254
STATE ZIP CODE

Joseph Dinelli
CONTACT PERSON

joseph.dinelli@level3.com
EMAIL

FEDERAL TAXPAYER NUMBER
47-0807040

FEDERAL TAXPAYER NUMBER
47-0735805

PAYMENT ADDRESS:

Department 182

PAYMENT P O BOX ADDRESS 1

PAYMENT STREET ADDRESS 2
Denver

CITY
CO 80291-0182
STATE ZIP CODE

813-349-1424
PHONE NUMBER

TOLL FREE NUMBER
720-567-1198
FAX NUMBER
September 30, 2014

Dear Mr. Dinelli:

Subject: Virginia Tech Contract # UCP-TS-014-07
Commodity/Service: Internet Provider Services

Thank you for responding to my letter of August 6, 2014 and agreeing to renew the contract for an additional year. The contract will now expire July 31, 2015.

The attached form shows your company information as listed in the university's vendor database. If any of this information changes, please make corrections directly on the form, and return to me. It is essential that this information be accurate in order for payments to be processed in a timely manner.

We look forward to working with you for an additional year.

Sincerely,

W. Thomas Kaloupek
Director of Materials Management
Telephone: (540) 231-8543

WTK/kbl

C: F.M. Pro
William Dougherty, Jeff Crowder, Joe Hutson, Pat Rodgers
<table>
<thead>
<tr>
<th><strong>FULL LEGAL NAME</strong></th>
<th><strong>FEDERAL TAXPAYER NUMBER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 3 Communications, LLC</td>
<td></td>
</tr>
<tr>
<td>(Company Name as it appears with your Federal Taxpayer Number)</td>
<td>(if different than ID# above)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>BUSINESS NAME/ DBA NAME/TA NAME</strong></th>
<th><strong>FEDERAL TAXPAYER NUMBER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 3 Communications, LLC</td>
<td></td>
</tr>
<tr>
<td>(If different than Full Legal Name)</td>
<td>(if different than ID# above)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>BILLING NAME</strong></th>
<th><strong>FEDERAL TAXPAYER NUMBER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 3 Communications, LLC</td>
<td></td>
</tr>
<tr>
<td>(Company name as it appears on your invoice)</td>
<td>(if different than ID# above)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>PURCHASE ORDER ADDRESS:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P O BOX ADDRESS 1</strong></td>
<td></td>
</tr>
<tr>
<td>1025 Eldorado Blvd</td>
<td></td>
</tr>
<tr>
<td><strong>STREET ADDRESS 2</strong></td>
<td></td>
</tr>
<tr>
<td>Broomfield</td>
<td></td>
</tr>
<tr>
<td><strong>CITY</strong></td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>80021-8254</td>
</tr>
<tr>
<td>STATE</td>
<td>ZIP CODE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>PAYMENT ADDRESS:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P O BOX ADDRESS 1</strong></td>
<td></td>
</tr>
<tr>
<td>Department 182</td>
<td></td>
</tr>
<tr>
<td><strong>STREET ADDRESS 2</strong></td>
<td></td>
</tr>
<tr>
<td>Denver</td>
<td></td>
</tr>
<tr>
<td><strong>CITY</strong></td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>80291-0182</td>
</tr>
<tr>
<td>STATE</td>
<td>ZIP CODE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>CONTACT PERSON</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Joseph Dinelli</td>
<td></td>
</tr>
<tr>
<td><strong>PHONE NUMBER</strong></td>
<td></td>
</tr>
<tr>
<td>813-349-1424</td>
<td></td>
</tr>
<tr>
<td><strong>TOLL FREE NUMBER</strong></td>
<td></td>
</tr>
<tr>
<td>720-567-1198</td>
<td></td>
</tr>
<tr>
<td><strong>EMAIL</strong></td>
<td></td>
</tr>
<tr>
<td>Tom Kalamupek</td>
<td></td>
</tr>
</tbody>
</table>
Dear Ms. Marmora:

Subject: Virginia Tech Contract # UCP-TS-014-07
Commodity/Service: Internet Provider Services

This is to inform you that the subject contract expires July 31, 2014. Since the university would like to renew the contract for an additional year, please advise concerning your intention by signing in the appropriate space listed below. Please return one signed copy of this letter to me by August 31, 2014.

Please review the attached form, which shows your company information as listed in the university's vendor database. If any of this information has changed, make corrections directly on the form, and return with this letter. It is essential that this information be accurate in order for payments to be processed in a timely manner.

Thank you for your attention to this matter.

Sincerely,

W. Thomas Kaloupek
Director of Materials Management
Telephone: (540) 231-6221

Level 3 Communications LLC agrees to renew the contract for an additional year in accordance with the terms and conditions of the subject contract.

Authorized Signature: Dwight E. Steiner
Name: Vice President, Legal
Title: (please print)
Level 3 Communications, LLC

**FULL LEGAL NAME**
(Company Name as it appears with your Federal Taxpayer Number)

<table>
<thead>
<tr>
<th><strong>FEDERAL TAXPAYER NUMBER</strong></th>
</tr>
</thead>
</table>

**BUSINESS NAME/ DBA NAME/TA NAME**
(If different than Full Legal Name)

<table>
<thead>
<tr>
<th><strong>FEDERAL TAXPAYER NUMBER</strong></th>
</tr>
</thead>
</table>

Level 3 Communications, LLC

**BILLING NAME**
(Company name as it appears on your invoice)

<table>
<thead>
<tr>
<th><strong>FEDERAL TAXPAYER NUMBER</strong></th>
</tr>
</thead>
</table>

**PURCHASE ORDER ADDRESS:**

<table>
<thead>
<tr>
<th><strong>PAYMENT ADDRESS:</strong></th>
</tr>
</thead>
</table>

P O BOX ADDRESS 1

<table>
<thead>
<tr>
<th><strong>PAYMENT P O BOX ADDRESS 1</strong></th>
</tr>
</thead>
</table>

1025 Eldorado Blvd

<table>
<thead>
<tr>
<th><strong>PAYMENT STREET ADDRESS 2</strong></th>
</tr>
</thead>
</table>

Broomfield

<table>
<thead>
<tr>
<th><strong>CITY</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>STATE</strong></th>
<th><strong>ZIP CODE</strong></th>
</tr>
</thead>
</table>

CO 80021-8254

<table>
<thead>
<tr>
<th><strong>PHONE NUMBER</strong></th>
</tr>
</thead>
</table>

Joseph Dinelli

<table>
<thead>
<tr>
<th><strong>CONTACT PERSON</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>EMAIL</strong></th>
</tr>
</thead>
</table>

elizabeth.lawson@level3.com

<table>
<thead>
<tr>
<th><strong>TOLL FREE NUMBER</strong></th>
</tr>
</thead>
</table>

720-567-1198

<table>
<thead>
<tr>
<th><strong>FAX NUMBER</strong></th>
</tr>
</thead>
</table>

Tomo Kaloupek

<table>
<thead>
<tr>
<th><strong>for office use</strong></th>
</tr>
</thead>
</table>

6/20/2014
SIXTH AMENDMENT TO MSA ADDENDUM

This SIXTH AMENDMENT TO MSA ADDENDUM ("Sixth Amendment") is entered into as of the 5th day of June, 2013 ("Sixth Amendment Date") by and between VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY ("Customer") and LEVEL 3 COMMUNICATIONS, LLC ("Level 3") and modifies the MSA Addendum ("Quilt") dated August 21, 2006 ("Addendum"), as amended, and the Master Service Agreement ("MSA") between such parties dated August 21, 2006. Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Addendum.

1. Colocation Service. Customer's two existing colocation racks shall be renewed for a 1-year Service Term commencing June 1, 2013, as set forth in the Fifth Amendment dated July 1, 2012.

2. Ratification. Except as set forth herein, the Agreement shall remain in effect.

IN WITNESS WHEREOF, the parties agree to the foregoing by executing this Sixth Amendment as of the Sixth Amendment Date.

VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY

By: [Signature]
Name: W.T. Kaldus
Title: DIRECTOR OF MATERIALS

LEVEL 3 COMMUNICATIONS, LLC

By: [Signature]
Name: Dwight L. Steiner
Title: Vice President, Legal
Attached is a proposed amendment to our Master Service Agreement (MSA) with Level3.

One purpose is to adjust prices for space and power we use in their building in McLean Virginia. While this is an increase, it is favorable to VT representing a very significant continued discount off their list prices and also price stability for a four year period.

Also, the amendment will result in a decrease of the Committed Data Rate ("CDR" which is the terminology on the invoices we receive) applicable to the HSIP service (internet access port) from 2G to 1G which will effectively result in a 50% price decrease to VT for that service; about $49,000 per year. In addition, we gain the ability to further reduce the CDR in the event any of our participants (UVA, ODU, VCU, VCCS, RU all together with VT) elects to purchase this service directly through L3 which would reduce demand for the shared service.

Below is history for your reference for the last amendment to this MSA from 2009. I have attached, for reference, the MSA and I can also send the other amendments for reference if you need them.

Pending your review, once signed the amendment should be sent to joseph.dinelli@level3.com for countersignature. I would appreciate an electronic copy of the fully executed amendment for our file.

Please let me know if you have questions or concerns. Thanks and best regards,

Jeff Crowder
231-3900

-----Original Message-----
From: Crowder, Jeff
Sent: Tuesday, June 02, 2009 9:56 AM
To: Kaloupek, W. Thomas
Subject: RE: level3 msa

Great thanks Tom.

If you get this in time, instead of putting in campus mail, could you leave the 3 signed copies with your receptionist, ask her to call me when they're ready, and I'll swing by and grab them?

Thanks,

Jeff
231-3900

-----Original Message-----
From: Kaloupek, W. Thomas
Thanks. In reviewing our payment history to this firm it appears that payments are such that I can sign the amendments and they Don't need to go to Dwight. So let's coordinate on anything related in the future for this contract.

Tom Kaloupek
Virginia Tech Director of Materials Management
Ph: 540-231-6221
Fx: 540-231-9628

-----Original Message-----
From: Crowder, Jeff
Sent: Tuesday, June 02, 2009 9:36 AM
To: Kaloupek, W. Thomas
Subject: RE: level3 msa

Yes, now that I see this document, I recall our discussions. I think the file is also missing the first amendment. If you could dig that out and send it to me, then we will have a full record. Plan to knock out the third amendment today.

Tom Kaloupek
Virginia Tech Director of Materials Management
Ph: 540-231-6221
Fx: 540-231-9628

-----Original Message-----
From: Crowder, Jeff
Sent: Tuesday, June 02, 2009 9:03 AM
To: Kaloupek, W. Thomas
Subject: level3 msa

Tom,

Sorry for the delay. I had some trouble with the scanner.

Here is the 2nd amendment to the Level3 MSA as you requested. Point 3 in this amendment is actually the substance that VCU is anxious for, in addition to the lower prices in the 3rd amendment we're working on now. Level3 has been hitting everyone with a bunch of surcharges and we were the only entity in the region successful in negotiating an amendment to put a stop to it. We were able to do this because we buy a lot of internet capacity from them on behalf of the other universities (it all flows through VT).

Thanks again for your help,
FIFTH AMENDMENT TO MSA ADDENDUM

This FIFTH AMENDMENT TO MSA ADDENDUM ("Fifth Amendment") is entered into as of the 1st day of July, 2012 ("Fifth Amendment Date") by and between VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY ("Customer") and LEVEL 3 COMMUNICATIONS, LLC ("Level 3") and modifies the MSA Addendum ("Quilt") dated August 21, 2006 ("Addendum"), as amended, and the Master Service Agreement ("MSA"), as amended, between such parties dated August 21, 2006. Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Addendum.

1. Colocation Service. Customer's two existing colocation racks shall be renewed for a 1-year Service Term commencing July 1, 2012, at the pricing set forth in the table below. The pricing shall also apply for two (2) one year option periods (for a total of 3 years at such pricing) if Customer elects to renew for such periods. Customer may also elect to renew for a 4th year, in which event the per rack pricing shall increase by 15% over the prices set forth in the table and the per amp rate shall be at the then-current market rate.

<table>
<thead>
<tr>
<th>SERVICEListComponent ID</th>
<th>PID</th>
<th>Service Term Renewal Date</th>
<th>Service Term</th>
<th>New Price per amp</th>
<th>New Price per Rack</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBDD3375</td>
<td>BBDD3375</td>
<td>5/1/2012</td>
<td>1 year</td>
<td>$700.00</td>
<td></td>
</tr>
<tr>
<td>BBT5557</td>
<td>BBDD5475</td>
<td>5/1/2012</td>
<td>1 year</td>
<td>$17.00</td>
<td></td>
</tr>
<tr>
<td>BBX9259</td>
<td>BBDD5475</td>
<td>5/1/2012</td>
<td>1 year</td>
<td>$17.00</td>
<td></td>
</tr>
<tr>
<td>BBDD5475</td>
<td>BBDD5475</td>
<td>5/1/2012</td>
<td>1 year</td>
<td>$17.00</td>
<td>$700.00</td>
</tr>
</tbody>
</table>

2. CDR for HSIP. As of the Fifth Amendment Date, the CDR applicable to HSIP Service ID BBKY8654 will be 1Gbps per month. The CDR applicable to Service ID BBPS0415 will be 2Gbps per month. Commencing on the Fifth Amendment Date, CDRs for HSIP purchased by members of the Mid-Atlantic Terascale Partnership ("MATP") shall count toward Customer's CDR for Service ID BBKY8654, provided that i) the MATP member purchases the HSIP directly from Level 3, ii) the reduction shall commence the first full billing month after Customer notifies Level 3 of MATP member purchases, iii) the reduction shall determined on a monthly basis and shall only apply for so long as the MATP member is committed to the CDR, and iv) the reduction applies only to the extent of the MATP members' CDR, not actual usage.

3. Ratification. Except as set forth herein, the MSA shall remain in effect.

IN WITNESS WHEREOF, the parties agree to the foregoing by executing this Fifth Amendment as of the Fifth Amendment Date.

VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY

By: [Signature]
Name: [W. T. Kalousek]
Title: [Director of Materials Management]

LEVEL 3 COMMUNICATIONS, LLC

By: [Signature]
Name: [__________]
Title: [__________]
FOURTH AMENDMENT TO MSA ADDENDUM

This FOURTH AMENDMENT TO MSA ADDENDUM ("Fourth Amendment") is entered into as of the 10 day of October, 2009 ("Fourth Amendment Date") by and between VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY ("Customer") and LEVEL 3 COMMUNICATIONS, LLC ("Level 3") and modifies the MSA Addendum ("Quilt") dated August 21, 2006 ("Addendum"), as amended, and the Master Service Agreement ("MSA") between such parties dated August 21, 2006 (collectively, the MSA and the Addendum shall be called the "Agreement"). Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Addendum.

1. As of the Fourth Amendment Date, an Ordering Party may order Level 3® Private Line Lease Service or Level 3 Ethernet Private Line Service (together "PL Service") under the MSA. Level 3 and the Ordering Party shall develop the applicable custom PL Service Statement of Work on a case by case basis. The price charged for PL Service in Proposal/Order No. Q1-14936345 is, as of the date of acceptance of such Proposal/Order No. by Level 3, the lowest fee charged or offered and received as payment in full by Level 3 to all higher education for a PL Service with the same endpoints, speed and other relevant specifications.

2. Ratification. Except as set forth herein, the Agreement shall remain in effect.

IN WITNESS WHEREOF, the parties agree to the foregoing by executing this Fourth Amendment as of the Fourth Amendment Date.

VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY

By: [Signature]
Name: W.T. Kaldreck
Title: Director of Marketing

LEVEL 3 COMMUNICATIONS, LLC

By: [Signature]
Name: Dwight E. Steiner
Title: Vice President, Legal
THIRD AMENDMENT TO MSA ADDENDUM

This THIRD AMENDMENT TO MSA ADDENDUM ("Third Amendment") is entered into as of the 1st day of May, 2009 ("Third Amendment Date") by and between VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY ("Customer") and LEVEL 3 COMMUNICATIONS, LLC ("Level 3") and modifies the MSA Addendum ("Quilt") dated August 21, 2006 ("Addendum"), as amended. Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Addendum.

1. New HSIP Service Pricing. As of the Third Amendment Date, new Customer Order Forms between Level 3 and Customer for Level 3 High Speed IP Services ("HSIP") shall be rated to the pricing set forth below and shall be for a three (3) year Service Term. Any HSIP Service not listed which is available on the Quilt Agreement will be rated in accordance with the then-current Quilt price at the time of order.

   • 1 Gbps port with minimum of 300 Mbps CDR with no summer minimum is $11 per Mbps.
   • 1 Gbps ethernet port with 1 Gbps CDR is $8000 per month.
   • 10 Gbps port with 1.85 Gbps CDR is $7.50 per Mbps.

2. New HSIP Service Term. Customer Order Forms for HSIP accepted after the Third Amendment Date shall have a three (3) year Service Term, provided that Customer may terminate at the end of first or second year of the Service Term with no penalty, provided Customer gives Level 3 notice of such termination at least sixty (60) days prior to the beginning of the second or third year of the Service Term, as appropriate. At the end of the 3-year Service Term, so long as the MSA is in effect the Service shall continue on a month to month basis until terminated by either party on thirty (30) days' notice.

3. Existing Service. For the avoidance of doubt, Customer Order Forms for HSIP accepted prior to the Third Amendment Date ("Existing HSIP") shall remain unaffected by this Third Amendment and shall, unless renewed as set forth in this Section 3, be subject to Section 2 of the Third Amendment to MSA Addendum between the parties. Existing services may be rerated upon submission of a Customer Order Form including a new term commitment in which case they shall be subject to the provisions of Sections 1 and 2 of this Third Amendment. This Third Amendment shall not affect any Customer Order Forms for Services other than HSIP.

4. Additional Ordering Parties. Virginia institutions identified on the Quilt Authorized Buyer's List, attached hereto as Attachment 1 and incorporated herein by this reference, ("Ordering Parties") shall be eligible to purchase Services under the terms set forth in this Agreement. Ordering Parties may order services by completing a Customer Order Form, which shall be deemed to incorporate a master service agreement with the same terms as the MSA, as amended by this Third Amendment. Invoices resulting from such ordered Services shall be submitted directly to the payment address shown on the Customer Order Form. Virginia Tech shall not be held liable for payment for Services ordered by other Ordering Parties as the legal relationship with respect to Services ordered by Ordering Parties shall be between each Ordering Party and Level 3. Additional Ordering Parties may be added to Attachment 1 by written agreement of the parties.
5. **MSA Term.** The term of the MSA shall be through July 31, 2014. The MSA may be renewed for successive one (1) year periods if agreed by the parties in writing.

IN WITNESS WHEREOF, the parties agree to the foregoing by executing this Third Amendment as of the Third Amendment Date.

VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY

**By:** 

Name: **B.J. KALOUPEK**  
Title: **Vice President of Mater. Mgmt**

LEVEL 3 COMMUNICATIONS, LLC

**By:** 

Name: **Dwight E. Steiner**  
Title: **Vice President, Legal**
Attachment 1

Virginia Quilt Authorized Buyers

George Mason University
College of William and Mary
Old Dominion University
Hampton University
Virginia Commonwealth University
University of Richmond
University of Virginia
Virginia Tech
Virginia Community College System
Radford University
Virginia Science Museum
Thomas Jefferson High School for Science and Mathematics
University of Mary Washington
Longwood University
SECOND AMENDMENT TO MSA ADDENDUM

This SECOND AMENDMENT TO MSA ADDENDUM ("Second Amendment") is entered into as of the 1st day of September, 2008 ("Second Amendment Date") by and between VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY ("Customer") and LEVEL 3 COMMUNICATIONS, LLC ("Level 3") and modifies the MSA Addendum ("Quilt") dated August 21, 2006 ("Addendum"), as amended by that certain First Amendment to MSA Addendum dated November 1, 2006 between Customer and Level 3 and all Customer Order Forms executed prior to the Second Amendment Date. Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Addendum.

1. As of the Second Amendment Date, all Customer Order Forms between Level 3 and Customer for Level 3 High Speed IP Services shall be rerated to $16/Mbps for the balance of the Service Term with no summer reduction in Committed Data Rate (CDR). Customer shall have a minimum CDR of 300 Mbps during the applicable term.

2. As of the Second Amendment Date, all Colocation and Cross Connect Customer Order Forms between Level 3 and Customer shall have a term ending June 30, 2009. Each Customer Order Form shall automatically renew for a successive one year term at each anniversary through the term of the MSA unless either Party notifies the other Party of intent to terminate an Order Form or to request a change in terms and conditions at least ninety (90) days prior to June 30 of the then-current term.

3. Customer is an agency of the Commonwealth of Virginia. Customer shall be required to pay to Level 3 only those taxes, surcharges, or other amounts which are required by a regulatory authority recognized by the Commonwealth of Virginia.

IN WITNESS WHEREOF, the parties agree to the foregoing by executing this Second Amendment as of the Amendment Date.

VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY

LEVEL 3 COMMUNICATIONS, LLC

By: [Signature]
Name: M. Dwight Sheehan, Jr.
Title: VP, Finance & CFO

By: [Signature]
Name: [Signature]
Title: [Signature]
FIRST AMENDMENT TO MSA ADDENDUM

This FIRST AMENDMENT TO MSA ADDENDUM ("First Amendment") is entered into as of the 151st day of November, 2006 ("Amendment Date") by and between VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY ("Customer") and LEVEL 3 COMMUNICATIONS, LLC ("Level 3") and modifies that certain "MSA Addendum ("Quilt")" dated August 21, 2006 ("Addendum") between Customer and Level 3. Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Addendum.

1. As of the Amendment Date, all Customer Order Forms between Level 3 and Customer for Level 3 High Speed IP Services shall be rerated to $19/Mbps for the balance of the Service Term. The pricing chart at the end of paragraph 5 of the Addendum shall be deleted and replaced with: Price per Mbps: $19.

2. Customer shall have a CDR of 250 Mbps for the Addendum Term.

3. Customer and Level 3 ratify all other provisions of the Addendum not changed by this First Amendment.

IN WITNESS WHEREOF, the parties agree to the foregoing by executing this First Amendment as of the Amendment Date.

VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY

By: M. Dwight Shelton
Name: M. Dwight Shelton
Title: VP for Budget & Financial Mgmt.

LEVEL 3 COMMUNICATIONS, LLC

By: [Signature]
Name: [Name]
Title: [Title]
Master Service Agreement
(SIPSA Version 5.0 - May 16, 2006)

This Master Service Agreement ("Agreement") is made this 21st day of August, 2006 between LEVEL 3 COMMUNICATIONS, LLC ("Level 3") and VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY ("Customer"). This Agreement provides the general terms and conditions applicable to Customer's purchase of communications services ("Service") from Level 3.

ARTICLE 1. ORDERS FOR AND DELIVERY OF SERVICE

1.1 Submission and Acceptance of Customer Order(s). Customer may submit requests for Service in a form designated by Level 3 ("Customer Order"). The Customer Order shall contain the duration for which Service is ordered ("Service Term") and pricing for Service; Service will continue on a month to month basis at the expiration of the Service Term at Level 3's then current rates. Level 3 will notify Customer of acceptance (in writing or electronically) of the Customer Order and the date by which Level 3 will install Service (the "Customer Commit Date"); renewal Customer Orders will be accepted by Level 3's continuation of Service. If Customer submits Customer Orders electronically, Customer shall assure that any passwords or access devices are available only to those having authority to submit Customer Orders.

1.2 Credit Approval and Deposits. Customer will provide Level 3 with credit information as requested. Level 3 may require Customer to make a deposit as a condition of Level 3's acceptance of any Customer Order or continuation of: a) any usage-based Service; or b) any non-usage based Service where Customer fails to timely make any payment due hereunder or Level 3 reasonably determines that Customer has had an adverse change in financial condition. Deposits will not exceed 2 months' estimated charges for Service and will be due upon Level 3's written request. When Service is discontinued, the deposit will be credited to Customer's account and the balance refunded.

1.3 Customer Premises. If access to non-Level 3 facilities is required for the installation, maintenance or removal of Level 3 equipment, Customer shall, at its expense, secure such right of access and shall arrange for the provision and maintenance of power and HVAC as needed for the proper operation of such equipment.

1.4 Scheduled Maintenance and Local Access. Scheduled maintenance will not normally result in Service interruption. If scheduled maintenance requires Service interruption, Level 3 will (i) provide Customer 7 days' prior written notice, (ii) work with Customer to try to minimize Service interruptions and (iii) use commercially reasonable efforts to perform such maintenance between midnight and 6:00 a.m. local time. Where Customer provides its own local access service: a) Customer will cooperate with Level 3 (including providing necessary LOA's) in connection with Level 3 circuit grooming; and b) where a related Service is disconnected or terminated, Customer will promptly provide Level 3 a written disconnection firm order commitment from the relevant local access provider.

ARTICLE 2. BILLING AND PAYMENT

2.1 Commencement of Billing. Level 3 will deliver written or electronic notice (a "Connection Notice") to Customer upon installation of Service. If Customer notifies Level 3 within 3 days after delivery of the Connection Notice that Service is not functioning properly, Level 3 shall correct any deficiencies and deliver a new Connection Notice to Customer. The date of delivery of an undisputed Connection Notice is the "Service Commencement Date". Charges shall be invoiced and commence on the Service Commencement Date, regardless of whether Customer is prepared to accept delivery of Service.

2.2 Payment of Invoices and Disputes. Invoices are delivered monthly and due 30 days after the date of invoice. Fixed charges are billed in advance and usage-based charges are billed in arrears. Billing for partial months is prorated. Billed amounts not paid within 45 days after date of invoice shall bear interest at 1.5% per month or the highest rate allowed by law (whichever is less). Customer is responsible for all charges respecting the Service, even if incurred as the result of unauthorized use. If Customer reasonably disputes an invoice, Customer must pay the undisputed amount and submit written notice of the disputed amount (with details of the nature of the dispute and the Services and invoices disputed). Disputes must be submitted in writing within 90 days from the date of the invoice. If the dispute is resolved against Customer, Customer shall pay such amounts plus interest from the date originally due.

2.3 Taxes and Fees. Except for taxes based on Level 3's net income, Customer will be responsible for all applicable taxes and fees that arise in any jurisdiction, including value added, consumption, sales, use, gross receipts, foreign withholding (which will be grossed up), excise, access, bypass, franchise or other taxes, fees, duties, charges or surcharges imposed on or incident to the provision, sale or use of Service (whether imposed on Level 3 or any affiliate of Level 3). Such charges may be shown on invoices as cost recovery fees. Charges for Service are exclusive of taxes. Customer may present Level 3 a valid exemption certificate and Level 3 will give effect thereto prospectively.

2.4 Regulatory and Legal Changes. If any change in applicable law, regulation, rule or order materially affects delivery of Service, the parties will negotiate appropriate changes to this Agreement. If the parties are unable to reach agreement within 30 days after Level 3's delivery of written notice requesting renegotiation: (a) Level 3 may pass any increased costs relating to delivery of Service through to Customer by delivering written notice of such increase at least 30 days in advance and (b) if Level 3 does so, Customer may terminate the affected Service without termination liability by delivering written notice to Level 3 within 30 days of the date of the notice of the increase.
2.5 Cancellation and Termination Charges.

(A) Customer may cancel a Customer Order (or portion thereof) prior to delivery of the Connection Notice upon written notice to Level 3 identifying the affected Customer Order and Service. If Customer does so, Customer shall pay Level 3 a cancellation charge equal to the sum of: (i) for “off-net” Service, third party termination charges for the cancelled Service; (ii) for “on-net” Service, 1 month’s monthly recurring charges for the cancelled Service; and (iii) the non-recurring charges for the cancelled Service (including any construction charges solely attributable to the delivery of Service to Customer). The term “off-Net” shall mean Service that originates from or terminates to any location that is not on the Level 3 network, and “on-Net” shall mean Service that originates from and terminates to a location that is on the Level 3 network.

(B) Customer may terminate Service after delivery of the Connection Notice upon 30 days’ written notice to Level 3 identifying the terminated Service. If Customer does so, or if Service is terminated by Level 3 as the result of an uncured default by Customer, Customer shall pay Level 3 a termination charge equal to the sum of: (i) all unpaid amounts for Service provided through the date of termination, (ii) 100% of the remaining monthly recurring charges that would have been incurred for the Service for months 1-12 of the Service Term after the termination, and (iii) 50% of the remaining monthly recurring charges that would have been incurred for the Service for months 13 through the end of the Service Term. The parties acknowledge that the cancellation or termination charges set forth in this Section 3.7 are a genuine estimate of the actual damages that Level 3 will suffer and are not a penalty.

ARTICLE 3. DEFAULT

If (A) Customer fails to make any payment when due and such failure continues for 5 business days after written notice from Level 3, or (B) either party fails to observe or perform any other material term of this Agreement and such failure continues for 30 days after written notice from the other party, then the non-defaulting party may: (i) terminate this Agreement and/or any Customer Order, in whole or in part, and/or (ii) subject to Section 4.1, pursue any remedies it may have at law or in equity.

ARTICLE 4. LIABILITIES AND SERVICE LEVELS

4.1 No Special Damages. Neither party shall be liable for any damages for lost profits, lost revenues, loss of anticipated savings, loss of data or cost of purchasing replacement services, or any indirect, incidental, special, consequential, exemplary or punitive damages arising out of the performance or failure to perform under this Agreement or any Customer Order.

4.2 Disclaimer of Warranties. LEVEL 3 MAKES NO WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, EXCEPT THOSE EXPRESSLY SET FORTH IN THIS AGREEMENT OR ANY APPLICABLE SERVICE SCHEDULE.

4.3 Service Levels. The “Service Level” commitments applicable to the Services are found in Level 3’s Service Schedules for each Service. If Level 3 does not achieve a Service Level, a credit will be issued to Customer as set forth in the applicable Service Schedule upon Customer’s request. Level 3’s maintenance log and trouble ticketing systems will be used for calculating any Service Level events. To request a credit, Customer must contact Level 3 Customer Service (contact information can be found at www.level3.com) or deliver a written request (with sufficient detail necessary to identify the affected Service) within 60 days after the end of the month in which the credit was earned. In no event shall the total credits issued to Customer per month exceed the non-recurring and monthly recurring charges for the affected Service for that month. Customer’s sole remedies for any outages, failures to deliver or defects in Service are contained in the Service Levels applicable to the affected Service.

4.4 Right of Termination for Installation Delay. In lieu of any Service Level credits for installation delays, if Level 3’s installation of Service is delayed for more than 30 business days beyond the Customer Commit Date, Customer may terminate the affected Service upon written notice to Level 3 and without payment of any applicable termination charge, provided such written notice is delivered prior to Level 3 delivering a Connection Notice for the affected Service. This Section shall not apply to any Service where Level 3 has agreed to construct network facilities in or to a new location not previously served by Level 3.

ARTICLE 5. GENERAL TERMS

5.1 Force Majeure. Neither party shall be liable, nor shall any credit allowance or other remedy be extended, for any failure of performance or equipment due to causes beyond such party’s reasonable control (“force majeure event”). In the event Level 3 is unable to deliver Service as a result of a force majeure event, Customer shall not be obligated to pay Level 3 for the affected Service for so long as Level 3 is unable to deliver the affected Service. Force majeure events along with scheduled maintenance under section 1.4 shall be considered “Excused Outages.”

5.2 Assignment and Resale. Neither party may assign its rights or obligations under this Agreement or any Customer Order without the prior written consent of the other party, which will not be unreasonably withheld. This Agreement shall apply to any permitted transferees or assignees. Nothing in this Agreement, express or implied, is intended to or shall confer upon any third party any right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

5.3 Affiliates. Service may be provided to Customer pursuant to this Agreement by an affiliate of Level 3, but Level 3 shall remain responsible to Customer for the delivery and performance of the Service.

5.4 Notices. All notices shall be in writing and sufficient and received if delivered in person, or when sent via facsimile, pre-paid overnight courier, electronic mail (if an e-mail address is provided below) or sent by U.S. Postal Service (or First Class International Post (as applicable)), addressed as follows:
IF TO LEVEL 3:

For billing inquiries/disputes, requests for Service Level credits and/or requests for disconnection of Service (other than for default):

Level 3 Communications, LLC
1025 Eldorado Blvd.
Broomfield, Colorado 80021
Attn: Director, Billing
Facsimile: (877) 460-9867
E-mail: billing@level3.com

For all other notices:

Level 3 Communications, LLC
1025 Eldorado Blvd.
Broomfield, Colorado 80021
Attn: General Counsel
Facsimile: (720) 888-5128

IF TO CUSTOMER:

Virginia Polytechnic Institute & State University
Network Infrastructure and Services
1770 Forecast Drive (0506)
Blacksburg, Virginia 24061
Facsimile: (540) 231-3928

Either party may change its notice address upon notice to the other party. All notices shall be deemed to have been given on (i) the date delivered if delivered personally, by facsimile or e-mail (one business day after delivery if delivered on a weekend or legal holiday), (ii) the business day after dispatch if sent by overnight courier, or (iii) the third business day after posting if sent by U.S. Postal Service (or other applicable postal delivery service).

5.5 Acceptable Use Policy, Data Protection. Customer’s use of Service shall comply with Level 3’s Acceptable Use Policy and Privacy Policy, as communicated in writing to Customer from time to time and which are also available through Level 3’s web site at www.level3.com. If any change to Level3’s Acceptable Use Policy and Privacy Policy creates a material adverse impact on Customer’s continued use of Service, Customer shall give Level 3 notice of such impact. Customer may terminate the affected Service without any further liability unless Level 3 agrees to allow Customer not to comply with the change causing such impact after within 14 days after receipt of the Customer’s notice of the impact. Level 3 may transfer, process and store billing and utilization data and other data necessary for Level 3’s operation of its network and for the performance of its obligations under this Agreement to or from the United States. Customer consents that Level 3 may (i) transfer, store and process such data in the United States; and (ii) use such data for its own internal purposes and as required by law. This data will not be disclosed to third parties.

5.6 Marks and Publicity: Non-Disclosure. Neither party shall have the right to use the other party's or its affiliates' trademarks, service marks or trade names without the prior written consent of the other party. Neither party shall issue any press release or other public statement relating to this Agreement, except as may be required by law or agreed between the parties in writing. Any information or documentation disclosed between the parties during the performance of this Agreement (including this Agreement) shall be subject to the terms and conditions of the applicable non-disclosure agreement then in effect between the parties.

5.7 Governing Law; Amendment. This Agreement shall be governed and construed in accordance with the laws of the Commonwealth of Virginia, without regard to its choice of law rules. This Agreement, including any Service Schedule(s) and Customer Order(s) executed hereunder, constitutes the entire and final agreement and understanding between the parties with respect to the Service and supersedes all prior agreements relating to the Service. This Agreement may only be modified or supplemented by an instrument executed by an authorized representative of each party. No failure by either party to enforce any right(s) hereunder shall constitute a waiver of such right(s).

5.8 Relationship of the Parties. The relationship between Customer and Level 3 shall not be that of partners, agents, or joint venturers for one another, and nothing contained in this Agreement shall be deemed to constitute a partnership or agency agreement between them for any purposes.
5.9 **Counterparts.** This Agreement may be executed in one or more counterparts, all of which taken together shall constitute one and the same instrument. Facsimile signatures shall be sufficient to bind the parties to this Agreement.

LEVEL 3 COMMUNICATIONS, LLC ("Level 3")

By _____________

Name ________

Title __________

VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY ("Customer")

By m. Dwight Shelby Jr.

Name m. Dwight Shelby Jr.

Title VP for Budget and Fin. Mgt.
1. Applicability. This Service Schedule is applicable only where Customer orders Colocation Space and associated services (i.e., power). Level 3 Colocation Service may be designated as (3)Center® Colocation in customer orders, order acceptance, service delivery, billing (and related) documents.

2. Definitions. Any capitalized terms used herein and not otherwise defined shall have the meaning set forth in the Agreement.

(A) “Colocation Area” shall mean the location within a Gateway in which Colocation Space ordered by Customer is located.

(B) “Colocation Space” shall mean the location(s) within the Colocation Area where Customer is permitted to colocate communications and networking equipment pursuant to a Customer Order accepted by Level 3.

(C) “Hot Aisle Cold Aisle” shall mean the arrangement of Customer equipment where the equipment air intake is facing a common aisle (“Cold Aisle”), and the air exhaust of the equipment faces the alternate common aisle (“Hot Aisle”), as designated by Level 3.

(D) “Colocation Environment” shall mean relative humidity in the Colocation Area of 40%-60% and temperature in the Colocation Space at a maximum of 78 degrees Fahrenheit (26 degrees Celsius), as measured 6'6" above the finished floor, and 8" in front of Customer equipment on the Cold Aisle.

3. Grant of License. Customer shall be granted the right to occupy the Colocation Space identified in an accepted Customer Order during the Service Term subject to the applicable rates set forth in such Customer Order. At the end of any stated Service Term, the Colocation Space will be provided to Customer on a month-to-month basis at Level 3’s then-current prices. Level 3 retains the right to access any Colocation Space for any legitimate business purpose at any time.

4. Use of Colocation Space. Customer shall be permitted to use the Colocation Space only for placement and maintenance of communications equipment. Customer may access the Colocation Space twenty four (24) hours per day, seven (7) days per week, subject to any and all rules, regulations and access requirements imposed by Level 3 governing such access.

5. Level 3 Maintenance. Level 3 shall perform janitorial services, environmental systems maintenance, power plant maintenance and other actions as are reasonably required to maintain the Colocation Area in a condition that is suitable for the placement of communications equipment. Level 3 shall maintain a Colocation Environment in the facility at all times. Customer shall install equipment in a Hot Aisle Cold Aisle configuration. Customer shall maintain the Colocation Space in an orderly and safe condition, and shall return the Colocation Space to Level 3 at the conclusion of the Service Term in the same condition (reasonable wear and tear excepted) as when such Colocation Space was delivered to Customer. EXCEPT AS EXPRESSLY STATED HEREIN OR IN ANY CUSTOMER ORDER, THE COLLOCATION SPACE SHALL BE DELIVERED AND ACCEPTED "AS IS" BY CUSTOMER, AND NO REPRESENTATION HAS BEEN MADE BY LEVEL 3 AS TO THE FITNESS OF THE COLLOCATION SPACE FOR CUSTOMER’S INTENDED PURPOSE.

6. Release of Landlord. If and to the extent that Level 3's underlying leases so require (but only if they so require) Customer hereby agrees to release Level 3's landlord (and its agents, subcontractors and employees) from all liability relating to Customer's access to the Gateway and the Colocation Area and Customer's use and/or occupancy of the Colocation Space.

7. Security. Level 3 will provide and maintain in working condition card readers, scanners and/or other access devices as selected by Level 3 for access to the Colocation Area. Customer shall under no circumstances “prop open” any door to, or otherwise bypass the Level 3 security measures for, the Colocation Area. Level 3 will provide a locking device for the Colocation Space, and Customer shall be solely responsible for locking and/or activating such device. In the event that unauthorized parties gain access to any Level 3 facility through access cards, keys or other access devices provided to Customer, Customer shall be responsible for any damages caused by such parties. Customer shall be responsible for the cost of replacing any security devices lost or stolen after delivery thereof to Customer.

8. Prohibited Activities. Customer shall abide by any posted or otherwise communicated rules relating to use of, access to, or security measures respecting each Level 3 facility.

9. Termination of Use. Level 3 shall have the right to terminate Customer’s use of the Colocation Space or the Service delivered therein in the event that: (a) Level 3’s rights to use the Gateway terminates or expires for any reason; (b) Customer is in default hereof; (c) Customer makes any material alterations to the Colocation Space without first obtaining the written consent of Level 3; (d) Customer allows personnel or contractors access to the Level 3 facilities who have not been approved by Level 3 in advance; or (e) Customer or any of its agents or employees possess any firearms, illegal drugs or alcohol in a facility or engage in any criminal activity in any facility. With respect to items (b), (c) and (d), unless (in Level 3’s opinion) Customer’s actions interfere or have the potential to interfere with other Level 3 customers, Level 3 shall provide Customer a written notice and a ten (10) day opportunity to cure before terminating Customer’s rights to the Colocation Space.
10. **Removal of Equipment.** Within 10 days following the expiration or termination of the Service Term for any Colocation Space, Customer shall remove all Customer equipment from the Colocation Space. In the event Customer fails to remove the equipment within such 10-day period, Level 3 may disconnect, remove and dispose of Customer’s equipment without prior notice. Customer shall be responsible for any costs and expenses incurred by Level 3, or its agent, representative or contractor, resulting from disconnection, removal, disposal and storage of Customer’s equipment. Level 3 shall not be obligated to release equipment to Customer unless Customer has paid all such costs and expenses and all other charges due and owing by Customer to Level 3 under the Agreement. Level 3 shall not be liable for any loss or damage incurred by Customer arising out of Level 3’s disconnection, removal, storage or disposal of Customer’s equipment.

11. **Sublicenses.** Customer shall not sublicense the use of Colocation Space. In the event Customer sublicenses use of the Colocation Space in violation of this Section 11, Level 3 may upon ten (10) days’ prior written notice reclaim the sublicensed portion of the Colocation Space. Customer shall surrender such reclaimed Colocation Space and shall be subject to termination charges associated with the reclaimed Colocation Space as provided in Section 2.5 of the Agreement. No refunds shall be made to Customer regarding reclaimed Colocation Space.

12. **Changes.**

(A) Level 3 reserves the right to change (at Level 3’s cost) the location or configuration of the Colocation Space licensed to Customer; provided that Level 3 shall not arbitrarily require such changes. Level 3 and Customer shall work in good faith to minimize any disruption in Customer’s services that may be caused by such changes in location or configuration of the Colocation Space.

(B) In the event any Customer Order for Colocation Space is altered (including, without limitation, any changes in the configuration or build-out of the Colocation Space) at Customer’s request after Customer’s submission and Level 3’s acceptance of such Customer Order that results in a delay of Level 3’s delivery of such Colocation Space to Customer, billing for such Colocation Space shall commence no later than the original Customer Commit Date.

13. **Insurance.** Prior to occupancy by Customer of any Colocation Space and during the Service Term, Customer shall maintain the following minimum insurance coverage: (a) Workers’ Compensation in compliance with all applicable statutes of appropriate jurisdiction (including Employer’s Liability with limits of $500,000 each accident); (b) Commercial General Liability with combined single limits of $1,000,000 each occurrence; and (c) Property insurance covering all of Customer’s personal property located in the Gateway. Customer acknowledges that it retains the risk of loss for, loss of (including, without limitation, loss of use), or damage to, Customer equipment and other personal property located in a Level 3 facility. Customer further acknowledges that Level 3’s insurance policies do not provide coverage for Customer’s personal property located in a Level 3 facility. Customer shall, at its option, maintain a program of property insurance or self-insurance covering loss of or damage to its equipment and other personal property. Customer shall furnish Level 3 with certificates of insurance demonstrating that Customer has obtained the required insurance coverage prior to use of any Level 3 facility. Such certificates shall contain a statement that the insurance coverage shall not be materially changed or cancelled without at least 30 days’ prior written notice to Level 3. Customer shall require any contractor, customer or other third party entering the Gateway on Customer’s behalf to procure and maintain the same types, amounts and coverage extensions as required of Customer above. Customer will be responsible for any claim against us caused (or alleged) by the negligence or willful misconduct of Customer, its agents, or employees.

14. **Storage of Customer Equipment.** Level 3 may, at its option, agree to store equipment that Customer intends to collocate in Customer’s Colocation Space for not more than 45 days prior to the applicable Customer Commit Date. Storage of such equipment is purely incidental to the Service ordered by Customer and Level 3 will not charge Customer a fee for such storage. No document delivered as part of such storage shall be deemed a warehouse receipt. Absent Level 3’s gross negligence or intentional misconduct, Level 3 shall have no liability to Customer or any third party arising from such storage. In the event Customer stores equipment for longer than 45 days, Level 3 may, but shall not be obligated to, return Customer’s equipment to Customer without liability, at Customer’s sole cost and expense.

15. **Promotional Signage.** Customer may display a single promotional sign with Customer’s name and/or logo on the outside of any Colocation Space; provided such signage does not exceed 8 inches by 11 inches. All other promotional signage is prohibited.

16. **Power.**

(A) The pricing for power shall be on a breakered amp load basis.

(B) The supportable power density in any Colocation Space is 125 watts/square foot (1250 watts/square meter) of primary breakered power. Any additional power required by Customer is subject to prior written approval by Level 3.
(C) In the event the power utility increases the price paid by Level 3 for power provided to any Colocation Space, Level 3 may pass-through to Customer such price increase upon prior written notice to Customer.

(D) Customer agrees not to place inverters for the purposes of conversion from DC power to AC power in the Colocation Space.

17. Service Levels.

(A) Installation Service Level. This Installation Service Level applies to cabinet and private suite Colocation Space. Level 3 will exercise commercially reasonable efforts to install any Colocation Space on or before the Customer Commit Date specified for such Colocation Space. This Installation Service Level shall not apply to Customer Orders that contain incorrect information supplied by Customer, Customer Orders that are altered at Customer's request after submission and acceptance by Level 3, or Customer Orders that require Level 3 to configure Colocation Space to specifications other than Level 3's standard specifications for Colocation Space (such standard specifications shall be made available to Customer upon request). In the event Level 3 does not meet this Installation Service Level for a particular Colocation Space for reasons other than an Excused Outage, Customer will be entitled to a service credit equal to the charges for one (1) day of the monthly recurring charges ("MRC") for the affected Colocation Space for each day of delay, up to a monthly maximum credit of four (4) days.

(B) Power Service Level. In the event of any outage of Level 3 provided power to the Colocation Space for reasons other than an Excused Outage, Customer will be entitled to a service credit off of the MRC for the affected Colocation Space based on the cumulative unavailability for the affected service in a given calendar month as set forth in the following table:

<table>
<thead>
<tr>
<th>Cumulative Unavailability (hrs:mins:secs)</th>
<th>Service Level Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00:01 - 00:05:00</td>
<td>2.5%</td>
</tr>
<tr>
<td>00:05:01 - 00:45:00</td>
<td>5%</td>
</tr>
<tr>
<td>00:45:01 - 04:00:00</td>
<td>10%</td>
</tr>
<tr>
<td>04:00:01 - 08:00:00</td>
<td>20%</td>
</tr>
<tr>
<td>08:00:01 - 12:00:00</td>
<td>30%</td>
</tr>
<tr>
<td>12:00:01 - 16:00:00</td>
<td>40%</td>
</tr>
<tr>
<td>16:00:01 - 24:00:00</td>
<td>50%</td>
</tr>
<tr>
<td>24:00:01 or greater</td>
<td>100%</td>
</tr>
</tbody>
</table>
1. **Applicability.** This Service Schedule is applicable only where Customer Orders Level 3® Cross Connect Service and/or Level 3® Mondo Condo Fiber Link Service. Level 3® Cross Connect Service and Level 3® Mondo Condo Fiber Link Service may be designated as (3)Link® Cross Connect Service and/or Mondo Condo Fiber Link Service in Customer Orders, order acceptance, service delivery, billing (and related) documents.

2. **Definitions.** Any capitalized terms used herein and not otherwise defined shall have the meaning set forth in the Agreement.

3. **Service Description.** Level 3 Cross Connect Service is copper or fiber optic cabling cross-connected between Level 3 provided Level 3® Colocation (cabinets and/or suites), other Level 3 provided Service or Facilities and/or third party provided services or facilities that terminate within the Level 3 Gateway. Customer Commit Dates may not be provided for Level 3 Cross Connect Service, in which case service delivery shall constitute Level 3’s acceptance. Level 3 Mondo Condo Fiber Link Service is fiber optic cabling that provides connectivity between the Level 3 Mondo Condo facility and the Level 3 Gateway in the same metropolitan area. Level 3 Mondo Condo Fiber Link Service can provide connectivity between Level 3® Colocation (cabinets and/or suites) within a Level 3 Mondo Condo facility and the Level 3 Gateway. Level 3 provided dark fiber and/or third party provided services or facilities that terminate within a Level 3 Gateway.

4. **Interconnection.** Unless otherwise agreed between the parties, any Level 3 Cross Connect Service or Level 3 Mondo Condo Fiber Link Service will be interconnected to a Level 3 provided panel within the Level 3 Gateway (and not directly to Customer provided equipment or facilities). Upon request of Customer at the time of submission of the applicable Customer Order, Level 3 will interconnect such Level 3 Cross Connect Service or Level 3 Mondo Condo Fiber Link Service directly to Customer provided equipment or facilities within the Level 3 Gateway; provided, however, Level 3 shall not be liable to Customer or any third party for any loss or damage to such Customer provided equipment or facilities arising out of such direct interconnection.

5. **Service Level.** Level 3 will exercise commercially reasonable efforts to install any Level 3 Cross Connect Service and any Level 3 Mondo Condo Fiber Link Service on or before the Customer Commit Date specified for the particular Level 3 Cross Connect Service or Level 3 Mondo Condo Fiber Link Service (as the case may be). This Installation Service Level shall not apply to Customer Orders that contain incorrect information supplied by Customer or Customer Orders that are altered at Customer's request after submission and acceptance by Level 3. In the event Level 3 does not meet this Installation Service Level for a particular Level 3 Cross Connect Service or Level 3 Mondo Condo Fiber Link Service (as the case may be) for reasons other than an Excused Outage, Customer will be entitled to a service credit off of the non-recurring charges ("NRC") and/or monthly recurring charges ("MRC") for the affected Level 3 Cross Connect Service or Level 3 Mondo Condo Fiber Link Service (as the case may be) as set forth in the following tables:

**For Level 3 Cross Connect Service:**

<table>
<thead>
<tr>
<th>Installation Delay Beyond Customer Commit Date</th>
<th>Service Level Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5 business days</td>
<td>Amount of NRC</td>
</tr>
<tr>
<td>6 - 20 business days</td>
<td>Amount of NRC plus charges for one (1) day of the MRC for each day of delay</td>
</tr>
<tr>
<td>21 + business days</td>
<td>Amount of NRC plus one (1) months’ MRC</td>
</tr>
</tbody>
</table>

**For Level 3 Mondo Condo Fiber Link Service:**

<table>
<thead>
<tr>
<th>Installation Delay Beyond Customer Commit Date</th>
<th>Service Level Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 - 30 business days</td>
<td>Amount of NRC</td>
</tr>
<tr>
<td>31 + business days</td>
<td>Amount of NRC plus one (1) months’ MRC</td>
</tr>
</tbody>
</table>
1. **Applicability.** This Service Schedule is applicable only where Customer orders Level 3® High Speed IP Service. Level 3® High Speed IP Service may be designated as (3)CrossRoads® Service in customer orders, order acceptance, service delivery, billing (and related) documents.

2. **Definitions.** Any capitalized terms used herein and not otherwise defined shall have the meaning set forth in the Agreement.

(A) "Back-Up Port" shall mean any Level 3 High Speed IP Service port other than the Primary Port that is configured to send/receive traffic only in the event that the applicable Primary Port becomes unavailable to send or receive traffic. The Back-Up Port must be identified as such in the Customer Order and provisioned on a Level 3 router or switch (within the same Level 3 Facility) that is separate from the Primary Port.

(B) "Committed Data Rate" shall mean the minimum data rate committed by Customer and set forth in the Customer Order (expressed in Megabits per second (Mbps)).

(C) "IP Fiber Extension" shall mean a dark fiber local access solution for Level 3 High Speed IP Service between the Level 3 Gateway and the Customer Premises (or such other point of interconnection) in which unprotected IP service is delivered using Level 3 Facilities and Customer facilities, as mutually agreed between the parties. Level 3 shall, in its sole discretion, determine whether Customer may utilize an IP Fiber Extension under this Service Schedule, or must obtain dark fiber pursuant to a separate dark fiber Service Schedule to be executed by the parties.

(D) "Off-Net Send Traffic" shall mean Send Traffic that terminates to any location that is not on the Level 3 network.

(E) "On-Net Intracity Send Traffic" shall mean On-Net Send Traffic that does not transit Level 3's long haul transmission facilities.

(F) "On-Net Send Traffic" shall mean Send Traffic that terminates to a location that is on the Level 3 network.

(G) "Primary Port" shall mean any Level 3 High Speed IP Service port that is configured to send/receive Customer's Level 3 High Speed IP Service traffic during normal network operations, as identified in the applicable Customer Order.

(H) "Receive Traffic" shall mean traffic from any origination point that is received by Customer from the Level 3 network.

(I) "Send Traffic" shall mean traffic from any origination point that is sent by Customer onto the Level 3 network.

3. **Service Description.** Level 3 High Speed IP Service is an IP transit service (including dedicated IP access port(s)) providing access to the Level 3 IP network and the global Internet. Level 3 High Speed IP Service is available through Serial/POS and Ethernet interfaces. Level 3 High Speed IP Service is available in a "Standard" configuration or a "Protected" configuration. Standard Level 3 High Speed IP Service is configured with a single Primary Port and no Backup Port. Protected Level 3 High Speed IP Service is configured with both a Primary Port and a Backup Port.

4. **Charges.** Customer may elect to order Service pursuant to the prices and terms of the “MSA Addendum” between the Customer and Level 3 incorporated herein by reference. If Customer orders Service pursuant to the MSA Agreement, in the event of a conflict between the MSA Addendum and the terms and conditions herein, the MSA Addendum will control. Alternatively, Customer may elect to be billed based on a Committed Data or at a Fixed Rate as described herein. The manner of billing selected will be set forth in each Customer Order.

(A) Committed Data Rate charges for Level 3 High Speed IP Service consist of four (4) components: (a) a non-recurring installation charge per port; (b) a monthly recurring port charge (if applicable); (c) a monthly recurring charge based on the Committed Data Rate; and (d) monthly usage charges to the extent usage in a particular month exceeds the Committed Data Rate.

The Committed Data Rate shall apply to either a particular Level 3 High Speed IP Service port or in the aggregate to more than one Level 3 High Speed IP Service ports provided hereunder, as stated in the applicable Customer Order(s) for such ports. The "Aggregate CDR: billing option (as defined below) is not available for all port interface speeds. The following shall apply (as applicable):

(1) If the Committed Data Rate applies to a particular Level 3 High Speed IP Service port, Customer's per port usage of Level 3 High Speed IP Service (both Send Traffic and Receive Traffic) across such port will be sampled every five (5) minutes for the previous five (5) minute period. At the end of the month, the top five percent (5%) of Send Traffic and Receive Traffic samples for such port shall be discarded. The higher of the resulting ninety-fifth (95\(^\text{th}\)) percentile value for Send Traffic or Receive Traffic for such port will be compared to the Committed Data Rate applicable to the port. If the ninety-fifth (95\(^\text{th}\)) percentile of either Send Traffic or Receive Traffic is higher than the applicable Committed Data Rate, Customer will, in addition to being billed for the Committed Data Rate, be billed at this ninety-fifth (95\(^\text{th}\)) percentile level for any usage in excess of such Committed Data Rate at the contracted-for price per Megabit.

If Customer's selected Level 3 High Speed IP Service port is a dedicated DS-3 or E-3 port, Customer may elect, subject to additional charges as mutually agreed between the parties, a rate limiting option (a "CDR Cap") in the applicable Customer Order. Upon such election, Level 3 will configure the port such that the maximum bandwidth allowed to be sent to or received from the port is
capped at the CDR Cap. Level 3 will not accept Customer traffic in excess of the CDR Cap if such option is elected. Any subsequent change to such CDR Cap will be subject to additional charges as mutually agreed between the parties.

(2) If the Committed Data Rate applies in the aggregate to more than one Level 3 High Speed IP Service ports (an “Aggregate CDR”) as set forth in the Customer Order for such ports, Customer’s usage of Level 3 High Speed IP Service (both Send Traffic and Receive Traffic) will be sampled every five (5) minutes for the previous five (5) minute period for each such port. At the end of the month, the top five percent (5%) of Send Traffic and Receive Traffic samples shall be discarded for each port. The higher of the resulting 95th percentile value for Send Traffic or Receive Traffic for each such port will be added together to determine Customer’s aggregate usage and such aggregate usage will be compared to the Aggregate CDR. If such aggregate usage is higher than the Aggregate CDR, Customer will, in addition to being billed for the Aggregate CDR, be billed for any aggregate usage in excess of the Aggregate CDR at the contracted-for price per Megabit. Unless otherwise agreed in writing by the parties, Aggregate CDRs apply only to the ports listed in the Customer Order. If Customer orders additional ports in a separate subsequent Customer Order(s), the new Customer Order stated in the new Customer Order shall be as stated therein for the ports set forth in such Customer Order. Alternatively, if Customer seeks to have the ports previously subject to an Aggregate CDR also contribute to the Aggregate CDR set forth in the new Customer Order(s), the new Customer Order(s) may provide for an increase in the Aggregate CDR for all such ports.

(B) Fixed Rate charges for Level 3 High Speed IP Service consist of two (2) components: (a) a non-recurring installation charge per port; and (b) a monthly recurring port charge.

5. **IP Addresses and Domain Names.** In the event that Level 3 assigns to Customer an IP address as part of the provision of Service, such IP address shall (upon Level 3’s request and to the extent permitted by law) revert to Level 3 after termination of the applicable Customer Order for any reason whatsoever, and Customer shall cease using such address. At any time after such termination, Level 3 may re-assign such address to another user. In the event that Level 3 obtains for Customer a domain name (which may be required in some European jurisdictions), Customer shall be the sole owner of such domain name. Customer shall be solely responsible for:

(A) paying any fees (including renewal fees) relating thereto;

(B) complying with any legal, technical, administrative, billing or other requirements imposed by the relevant domain name registration authority;

(C) modifying such domain name in the event Customer changes service providers; and

(D) all third party claims (including claims for intellectual property infringement) relating thereto.

6. **IP Fiber Extensions.**

(A) Pursuant to a Customer Order submitted by Customer and accepted by Level 3, the parties may agree that Level 3 will provide Customer with an IP Fiber Extension as part of the local access solution for any Level 3 High Speed IP Service provided hereunder. Level 3 will invoice Customer, and Customer agrees to pay Level 3, the charges associated with any such IP Fiber Extension as set forth in the applicable Customer Order. Unavailability or degradation of Level 3 High Speed IP Service caused by or attributable to IP Fiber Extensions shall be considered Excused Outages. The foregoing notwithstanding, Level 3 will use commercially reasonable efforts to respond to any such unavailability or degradation (on Level 3 Facilities) associated with any IP Fiber Extension within four (4) hours after becoming aware of the same and shall use commercially reasonable efforts to repair traffic-affecting discontinuity within twelve (12) hours after Level 3’s representatives arrive at the problem site and have the ability to begin uninterrupted repair activities.

(B) Level 3 shall have the right to supervise and control in a reasonable manner all activities concerning any IP Fiber Extension provided hereunder, including, without limitation, all Level 3 manholes/handholes. Any work required by Customer respecting any IP Fiber Extension provided hereunder, including without limitation, (i) splicing the Customer fibers, and (ii) interconnection between the Customer network and the Level 3 network, shall be undertaken only by or (with Level 3’s consent) under the supervision of Level 3.

(C) Prior to delivery of any IP Fiber Extension, Level 3 shall test the dark fiber contained in such IP Fiber Extension in accordance with the then-current version of Level 3’s interconnection policies and guidelines.

7. **Service Levels.**

(A) **Installation Service Level.** Level 3 will exercise commercially reasonable efforts to install any Level 3 High Speed IP Service on or before the Customer Commit Date specified for the particular Level 3 High Speed IP Service. This Installation Service Level shall not apply to Customer Orders that contain incorrect information supplied by Customer or Customer Orders that are altered at Customer’s request after submission and acceptance by Level 3. In the event Level 3 does not meet this Installation Service Level for a particular Level 3 High Speed IP Service for reasons other than an Excused Outage, Customer will be entitled to a service credit for each day of delay equal to either (i) for Level 3 High Speed IP Service billed on an Aggregate CDR basis, the charges for one (1) day of the pro rata share of the monthly recurring charges (“MRC”) associated with the Aggregate CDR for the affected Level 3 High Speed IP Service port(s) (pro-rated based on the number of total ports that contribute to such Aggregate CDR) or (ii) for Level 3 High Speed IP Service with any other manner of billing, the charges for one (1) day of any Service for the affected Level 3 High Speed IP Service port(s), in each case up to a monthly maximum credit of ten (10) days.
(B) **Availability Service Level.** The Availability Service Level for Level 3 High Speed IP Service is 99.98% for Standard Level 3 High Speed IP Service and 99.99% for Protected Level 3 High Speed IP Service. Standard Level 3 High Speed IP Service is considered unavailable if the Primary Port is unable to send or receive traffic; Protected Level 3 High Speed IP Service is considered unavailable if both the Primary Port and the Backup Port are unable to send or receive traffic. If credits are due under this Availability Service Level for a particular unavailability event, Service credits will not be payable under Section 7(C) or 7(D) for the same unavailability event.

In the event that Level 3 High Speed IP Service becomes unavailable for reasons other than an Excused Outage, Customer will be entitled to a service credit off of the greater of (i) the port MRC (except for any Level 3 High Speed IP Service billed on an Aggregate CDR basis) for the affected Level 3 High Speed IP Service port (if applicable), and (ii) the actual usage charges, if any, (calculated on a Megabit basis at the contracted-for price per Megabit) associated with the affected Level 3 High Speed IP Service port for the particular month. Service credits, in each case, are based on the cumulative unavailability of the affected Level 3 High Speed IP Service port in a given calendar month as set forth in the following table:

For Standard Level 3 High Speed IP Service:

<table>
<thead>
<tr>
<th>Cumulative Unavailability (in hrs mins secs)</th>
<th>Service Level Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00:01 - 00:10:00</td>
<td>No Credit</td>
</tr>
<tr>
<td>00:10:01 - 00:45:00</td>
<td>5%</td>
</tr>
<tr>
<td>00:45:01 - 04:00:00</td>
<td>10%</td>
</tr>
<tr>
<td>04:00:01 - 08:00:00</td>
<td>20%</td>
</tr>
<tr>
<td>08:00:01 - 12:00:00</td>
<td>30%</td>
</tr>
<tr>
<td>12:00:01 - 16:00:00</td>
<td>40%</td>
</tr>
<tr>
<td>16:00:01 - 24:00:00</td>
<td>50%</td>
</tr>
<tr>
<td>24:00:01 or greater</td>
<td>100%</td>
</tr>
</tbody>
</table>

For Protected Level 3 High Speed IP Service:

<table>
<thead>
<tr>
<th>Cumulative Unavailability (in hrs mins secs)</th>
<th>Service Level Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00:01 - 00:05:00</td>
<td>No Credit</td>
</tr>
<tr>
<td>00:05:01 - 00:45:00</td>
<td>15%</td>
</tr>
<tr>
<td>00:45:01 - 04:00:00</td>
<td>35%</td>
</tr>
<tr>
<td>04:00:01 - 08:00:00</td>
<td>50%</td>
</tr>
<tr>
<td>08:00:01 - 12:00:00</td>
<td>75%</td>
</tr>
<tr>
<td>12:00:01 or greater</td>
<td>100%</td>
</tr>
</tbody>
</table>

(C) **Delay Service Level.** The Delay Service Level for Level 3 High Speed IP Service is as set forth in the following table:

<table>
<thead>
<tr>
<th>Route</th>
<th>Delay Service Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>intra- U.S.</td>
<td>25 ms</td>
</tr>
<tr>
<td>intra-Europe</td>
<td>15 ms</td>
</tr>
<tr>
<td>London to New York, NY</td>
<td>40 ms</td>
</tr>
</tbody>
</table>

The Delay Service Level is measured as an average one-way delay over a calendar month for traffic on the Level 3 network between Gateways. Delay measurements may be obtained from the Level 3 website at www.level3.com. In the event of a delay in excess of the Service Levels set forth above for reasons other than an Excused Outage, Customer will be entitled to receive a service credit off of the greater of (i) the port MRC (except for any Level 3 High Speed IP Service billed on an Aggregate CDR basis) for the affected Level 3 High Speed IP Service port (if applicable), and (ii) the actual usage charges, if any, (calculated on a Megabit basis at the contracted-for price per Megabit) associated with the affected Level 3 High Speed IP Service port for the particular month. Service credits, in each case, are as set forth in the following table:

<table>
<thead>
<tr>
<th>Amount of Delay in Excess of Service Level</th>
<th>Service Level Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 - 5 ms</td>
<td>10%</td>
</tr>
<tr>
<td>5.1 - 10 ms</td>
<td>20%</td>
</tr>
<tr>
<td>10.1 - 15 ms</td>
<td>30%</td>
</tr>
<tr>
<td>15.1 - 20 ms</td>
<td>40%</td>
</tr>
<tr>
<td>20.1 - 25 ms</td>
<td>50%</td>
</tr>
<tr>
<td>25.1 ms or greater</td>
<td>100%</td>
</tr>
</tbody>
</table>
Packet Delivery Service Level. The Packet Delivery Service Level for Level 3 High Speed IP Service is 99.95% for On-Net traffic between Gateways. Packet Delivery is the average number of Internet Protocol ("IP") packets of information that transit the Level 3 network and are delivered by Level 3 to the intended On-Net destination in a calendar month. Packet Delivery measurements may be obtained from the Level 3 web site at www.level3.com. In the event Level 3 does not meet the Packet Delivery Service Level for reasons other than an Excused Outage or as a result of any Off-Net Local Loop (whether provisioned by Customer or Level 3), Customer will be entitled to receive a service credit off of the greater of (i) the port MRC (except for any Level 3 High Speed IP Service billed on an Aggregate CDR basis) for the affected Level 3 High Speed IP Service port (if applicable), and (ii) the actual usage charges, if any, (calculated on a Megabit basis at the contracted-for price per Megabit) associated with the affected Level 3 High Speed IP Service port (if applicable) for the particular month. Service credits, in each case, are as set forth in the following table:

<table>
<thead>
<tr>
<th>Packet Delivery Service Level Credit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>99.5 - 99.949%</td>
<td>10%</td>
</tr>
<tr>
<td>99 - 99.49%</td>
<td>20%</td>
</tr>
<tr>
<td>98 - 99.99%</td>
<td>30%</td>
</tr>
<tr>
<td>97 - 97.99%</td>
<td>40%</td>
</tr>
<tr>
<td>96 - 96.99%</td>
<td>50%</td>
</tr>
<tr>
<td>95.99% or less</td>
<td>100%</td>
</tr>
</tbody>
</table>

8. Chronic Outage. Customer may elect to terminate an affected Level 3 High Speed IP Service prior to the end of the Service Term without termination liability if, for reasons other than an Excused Outage:

(1) For Protected Level 3 High Speed IP Service, such Protected Level 3 High Speed IP Service is unavailable (as defined in Section 7(B) above) for four (4) or more separate occasions of more than two (2) hours each OR for more than twenty four (24) hours in the aggregate in any calendar month; or

(2) For Standard Level 3 High Speed IP Service, such Standard Level 3 High Speed IP Service is unavailable (as defined in Section 7(B) above) for three (3) or more separate occasions of more than twelve (12) hours each OR for more than forty two (42) hours in the aggregate in any calendar month.

Customer may only terminate such Level 3 High Speed IP Service that is unavailable as described above, and must exercise its right to terminate the affected Level 3 High Speed IP Service under this Section, in writing, within thirty (30) days after the event giving rise to a right of termination hereunder, which termination will be effective as set forth by Customer in such notice of termination. Except for any credits that have accrued pursuant to Section 7, this Section 8 sets forth the sole remedy of Customer for chronic outages or interruptions of any Level 3 High Speed IP Service.

9. Resale Restriction. Notwithstanding anything to the contrary in the Agreement, Customer is prohibited from reselling any Level 3 High Speed IP Service or any ports provided pursuant to this Service Schedule to a third party without the express written consent of Level 3. Customer may conduct non-profit aggregation share costs among members of the Mid Atlantic Terascale Partnership, NetworkVirginia participants, NWVng gigaPOP participants, Mid Atlantic Broadband Cooperative Members and other nonprofit institutions of education and research who are affiliates or collaborators of Customer.
MSA ADDENDUM
("Quilt")

This MSA Addendum (the "Addendum") is entered into this 21st day of August 2006 ("Effective Date") by and between Virginia Polytechnic Institute & State University ("Customer") and Level 3 Communications, LLC ("Level 3"), and modifies that certain Master Service Agreement to which Customer and Level 3 are parties, along with those Customer Orders for (3)CrossRoads SM Service submitted and accepted under the Master Service Agreement (the Master Service Agreement and such Customer Orders, collectively, the "Terms"). Capitalized terms used but not defined herein shall have the meanings set forth in the Terms. The Terms are hereby modified in the following respects:

1. **Addendum Term.** The term of this Addendum ("Addendum Term") shall commence upon the Effective Date and shall continue for the Service Term of any Customer Orders for (3)CrossRoads SM Services submitted by Customer and accepted by Level 3 for one (1) year thereafter.

2. **Service Term.** A new sentence is added to Section 1.16 of the Terms immediately following the first sentence thereof reading as follows: "For (3)CrossRoads SM Service ordered and delivered pursuant to this Addendum, the Service Term shall be two (2) years (measured starting on the Service Commencement Date)."

3. **Committed Data Rate.** Customer hereby makes to Level 3 a Committed Data Rate ("CDR") of Mbps of (3)CrossRoads SM Service per month. If Customer’s CDR is 500 Mbps per month or greater, Customer shall not be required to meet its CDR during the first full month following the Service Commencement Date.

4. **Waiver of CDR.** Level 3 will reduce Customer's CDR obligation by fifty percent (50%) under all Customer Orders submitted by Customer taken as a whole) for one (1), three (3) consecutive month period during each calendar year of the Service Term, provided that: (i) Customer must give Level 3 not less than thirty (30) days' prior written notice of its desire to have its CDR obligation waived for a stated three (3) month period; and (ii) Customer must not be otherwise in breach of these Terms.

5. **Pricing.** Customer is either a participant in, or a member of a participant in, an organization known as "The Quilt Network." Each participant in The Quilt Network (each a "Quilt Participant") is identified below (and each Quilt Participant has member organizations within it, each a "Participant Member"):

<table>
<thead>
<tr>
<th>Name of Entity Authorized to Purchase from the Quilt Vendor Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corp. for Education Network Initiative in California (CENIC)</td>
</tr>
<tr>
<td>University of Wisconsin (Madison &amp; Milwaukee)</td>
</tr>
<tr>
<td>Brandeis University</td>
</tr>
<tr>
<td>University of Washington</td>
</tr>
<tr>
<td>Front Range Gigapop (FRGP)</td>
</tr>
<tr>
<td>WiscNet</td>
</tr>
<tr>
<td>Brown University</td>
</tr>
<tr>
<td>Pittsburgh Gigaosc</td>
</tr>
<tr>
<td>University of Colorado – Boulder</td>
</tr>
<tr>
<td>University of Illinois at Champaign-Urbana</td>
</tr>
<tr>
<td>Dartmouth College</td>
</tr>
<tr>
<td>Pittsburgh Supercomputing Center/Carnegie Mellon University</td>
</tr>
<tr>
<td>University of Colorado at Denver</td>
</tr>
<tr>
<td>University of Minnesota</td>
</tr>
<tr>
<td>Harvard University</td>
</tr>
<tr>
<td>Pittsburgh Supercomputing Center/Carnegie Mellon University</td>
</tr>
<tr>
<td>UCAR</td>
</tr>
<tr>
<td>Notre Dame</td>
</tr>
<tr>
<td>MIT</td>
</tr>
<tr>
<td>Southern Crossroads (SoX)</td>
</tr>
</tbody>
</table>

Proprietary & Confidential
<table>
<thead>
<tr>
<th>Great Plains Network (and KANREN)</th>
<th>Purdue University</th>
<th>Northeastern University</th>
<th>SURA</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Kansas Center for Research</td>
<td>University of Iowa</td>
<td>OSHEAN</td>
<td>Texas Gigapop</td>
</tr>
<tr>
<td>Oklahoma State Regents for Higher Education</td>
<td>Iowa State</td>
<td>Tufts University</td>
<td>Texas A&amp;M University System Health Science Center</td>
</tr>
<tr>
<td>&quot;MOREnet, Missouri Research and Education Network&quot;</td>
<td>Illinois Institute of Technology</td>
<td>University of Connecticut</td>
<td>Texas A&amp;M University</td>
</tr>
<tr>
<td>The University of Nebraska at Lincoln</td>
<td>De Paul University</td>
<td>University of Maine</td>
<td>Rice University</td>
</tr>
<tr>
<td>Indiana Gigapop</td>
<td>Bradley University</td>
<td>University of Massachusetts-Amherst</td>
<td>University of Houston</td>
</tr>
<tr>
<td>Intermountain Gigapop</td>
<td>Illinois Century Network</td>
<td>University of New Hampshire</td>
<td>Baylor College of Medicine</td>
</tr>
<tr>
<td>MArPI</td>
<td>Southern Illinois University</td>
<td>University of Rhode Island</td>
<td>Stephen F. Austin State University</td>
</tr>
<tr>
<td>&quot;Meth Network, Inc. (Meth)&quot;</td>
<td>NetWork Virginia/Virginia Gigapop</td>
<td>University of Vermont</td>
<td>Texas Tech University</td>
</tr>
<tr>
<td>Mid-Atlantic Crossroads (MAX)</td>
<td>North Carolina Gigapop (MCNC)</td>
<td>Yale University</td>
<td>University of Texas</td>
</tr>
<tr>
<td>Metropolitan Research and Education Network (MREN)</td>
<td>North Carolina Gigapop (MCNC)</td>
<td>NYSERNET</td>
<td>Aldine ISD</td>
</tr>
<tr>
<td>Univ. of Chicago</td>
<td>Northern Lights Gigapop</td>
<td>CARNET</td>
<td>Houston Community College System</td>
</tr>
<tr>
<td>Univ. of Illinois at Chicago</td>
<td>Northern Crossroads (NoX)</td>
<td>Oregon Gigapop</td>
<td></td>
</tr>
<tr>
<td>Northwestern University</td>
<td>Boston College</td>
<td>University of Oregon (OWEN/NERO)</td>
<td></td>
</tr>
<tr>
<td>National Center for Supercomputing Applications (NCSA)</td>
<td>Boston University</td>
<td>Pacific Northwest Gigapop</td>
<td></td>
</tr>
</tbody>
</table>

Level 3 intends to (but shall not be obligated to) offer (3)CrossRoads\textsuperscript{SM} Service to each Quilt Participant (and where a Quilt Participant is unable to contract with Level 3, to a selected Participant Member of such Quilt Participant).

Customer's price per month per Mbps of (3)CrossRoads\textsuperscript{SM} Service ordered pursuant to this Addendum shall be prospectively adjusted by Level 3 each calendar quarter (March 31, June 30, September 30 and December 31) during the Addendum Term, such pricing to be applicable to Customer's (3)CrossRoads\textsuperscript{SM} Service during the calendar quarter immediately following the adjustment.

Pricing adjustments shall be made by Level 3 by aggregating the contractual CDR's of all Quilt Participants and Participant Members with whom Level 3 has agreed to sell (3)CrossRoads\textsuperscript{SM} Service on terms substantially similar to those stated in these Terms, and applying that aggregated CDR and adjusting Customer's price per Mbps in accordance with the chart below.
Quilt Aggregate CDR | Quilt Member Pricing – 1 Year Term* | Quilt Member Pricing – 2 Year Term*
---|---|---
0,000 | $38.00 | $35.00
13,000 | $34.00 | $31.00
15,000 | $32.00 | $29.00
17,500 | $29.00 | $27.00
20,000 | $27.00 | $26.00
25,000 | $25.00 | $24.00

*Customer will be charged additional usage over its individual CDR at the price per Mbps above.

6. **Port Fees.** Port Fees applicable to Customer’s (3)CrossRoadsSM Service shall be as set forth in the chart below:

<table>
<thead>
<tr>
<th>Port Type</th>
<th>MRC per port</th>
<th>Non-Recurring Charge (NRC) per port</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS-3</td>
<td>$1,500</td>
<td>$6,000</td>
</tr>
<tr>
<td>OC-3</td>
<td>$3,000</td>
<td>$8,000</td>
</tr>
<tr>
<td>OC-12</td>
<td>$6,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>100BaseT</td>
<td>$1,000</td>
<td>$1,500</td>
</tr>
<tr>
<td>GigE MMF</td>
<td>$2,500</td>
<td>$5,000</td>
</tr>
<tr>
<td>GigE SMF (up to 10km)</td>
<td>$2,500</td>
<td>$10,000</td>
</tr>
<tr>
<td>GigE SMF (up to 70km)</td>
<td>$2,500</td>
<td>$15,000</td>
</tr>
<tr>
<td>OC-48</td>
<td>$15,000</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

Notwithstanding the foregoing, Customer’s monthly recurring (but not non-recurring) port charges shall be waived on a stated number (dependent on Customer’s CDR) of 100BaseT, GigE MMF, GigE SMF, OC-3 and OC-12 ports, all in accordance with the chart below:

<table>
<thead>
<tr>
<th>Customer’s CDR</th>
<th>Number of Ports on which MRC’s are waived</th>
</tr>
</thead>
<tbody>
<tr>
<td>250 Mbps</td>
<td>1</td>
</tr>
<tr>
<td>500 Mbps</td>
<td>2</td>
</tr>
<tr>
<td>750 Mbps</td>
<td>3</td>
</tr>
<tr>
<td>1000 Mbps</td>
<td>4</td>
</tr>
<tr>
<td>2000 Mbps</td>
<td>8</td>
</tr>
</tbody>
</table>

MRCs shall apply in all cases to OC-48 ports.

7. **Services.** The parties acknowledge and agree that this Addendum shall only apply to the (3)CrossRoadsSM Service ordered by Customer and accepted by Level 3.

IN WITNESS WHEREOF, the parties agree to the foregoing by executing this Addendum below, effective as of the Effective Date set forth above.
Level 3 Communications, LLC
By: [Signature]
Name: Dwight Smith
Its: [Signature]

Virginia Polytechnic Institute & State University
By: [Signature]
Name: M. Dwight Shelton
Its: [Signature]
MSA SUPPLEMENT

This MSA SUPPLEMENT ("Supplement") is entered into as of the ___ day of __________________________, 2009 ("Supplement Date") by and between VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY ("Customer") and LEVEL 3 COMMUNICATIONS, LLC ("Level 3") and modifies the Master Service Agreement between the parties dated August 21, 2006 (as previously amended or modified, the "MSA"). Capitalized terms used but not defined herein shall have the meanings ascribed to them in the MSA.

1. As of the Supplement Date, the attached Level 3® Professional Services schedule shall be added to the MSA.

2. Except as modified herein, the MSA shall remain in full force and effect.

IN WITNESS WHEREOF, the parties agree to the foregoing by executing this Supplement as of the Supplement Date.

VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY

By: __________________________
Name: W. T. Kalupnik
Title: Director of Materials Management

LEVEL 3 COMMUNICATIONS, LLC

By: __________________________
Name: Dwight E. Steiner
Title: Vice President, Legal
SERVICE SCHEDULE
LEVEL 3® PROFESSIONAL SERVICES

1. **Applicability.** This Service Schedule ("Schedule") applies where Customer orders Level 3® Professional Services ("Professional Services").

2. **Definitions.** Capitalized terms used and not otherwise defined shall have the meaning set forth in the Agreement.

   (A) "Basic Field Tech Services" ("BFTS") shall mean technician services, which may include, without limitation, (i) unscheduled basic on-site, on demand maintenance and support, including but not limited to power cycling, troubleshooting and escorts, or (ii) scheduled support, maintenance, installation and removal of equipment, cabling and other related support services. Each level of BFTS is more particularly described in Level 3's then-current BFTS Description. A copy of Level 3's then-current BFTS Description will be provided to Customer upon request.

   (B) "Effective Date" means the date this Schedule is made a part of the Agreement.

   (C) "Property" means any invention, work of authorship, trade secret, processes, know-how, technologies or ideas, including patents, copyrights and other intellectual property developed by Level 3 or any of its employees, agents, or subcontractors.

3. **Term of Schedule.** The term of this Schedule shall commence on the Effective Date and shall continue in effect thereafter for the term of the Agreement. Unless Customer is in default, any services being provided at the time of termination of the Agreement shall continue upon the terms and conditions of this Schedule until the end of the term of the applicable Exhibit A.

   3.1 **Services to be Performed.** Level 3 may perform any of the following categories of Professional Services upon Customer's request: (i) Consulting and Implementation; (ii) Network Monitoring and Management; and (iii) Field Tech Services (Basic and Enhanced). Except as described in Section 3.2 below, each Customer request for Professional Services shall require preparation of a separate summary of services to be performed ("Exhibit A") substantially in the form attached hereto. Each Exhibit A, once executed between the parties, shall be a part of the Agreement and this Schedule and incorporated herein. All Exhibits' A shall be sequentially numbered for ease of identification, e.g., Exhibit A-1, A-2, A-3 and so forth. Each Exhibit A shall have a term associated with a start and end date for the Professional Services described in such Exhibit A.

   3.2 **Basic Field Tech Services.**

   (A) Customer may request Level 3 to provide BFTS to Customer within a Level 3 Tier 1 or Tier 2 Site (as such sites are defined by Level 3) from time to time without the need for an Exhibit A by contacting Level 3 as directed in the BFTS Description. BFTS requested to be performed at any location other than a Tier 1 or Tier 2 Site will require completion of an Exhibit A by the parties. For BFTS of the type set forth in Section 2(A)(ii) above, Level 3 shall not be obligated to perform such BFTS until a method of procedure ("MOP") has been provided by Customer and mutually agreed to by the parties in writing. Upon Level 3's acceptance of such MOP, if required, Level 3 will perform the BFTS in accordance with Customer's directions.

   (B) Under no circumstances will Level 3 be responsible for performing any warranty-affecting work, and Level 3 shall not be liable to Customer or any third party to the extent any work performed violates and/or voids, in whole or in part, any equipment, software and/or manufacturer's warranty.

   (C) **Response Time Service Level.** The Response Time Service Level for BFTS, if any, shall be set forth in the BFTS Description.

4. **Rates and Expenses.** Customer shall pay Level 3 the rate(s) and actual and reasonable expenses specified in the applicable Exhibit A for the Professional Services performed by Level 3 or as set forth in the BFTS Description, attached and incorporated herein by reference, as applicable.

5. **Work Product.** If Level 3 or any employee, agent, or subcontractor of Level 3 develops or creates any Property, that Property shall be and remain the exclusive property of Level 3 and shall not be considered a work for hire. If Customer desires to make use of the Property, then Customer and Level 3 shall use their commercially reasonable efforts to negotiate for the license of the Property to Customer. Customer shall have no right to sell, lease, license or otherwise transfer, with or without consideration, any Property to any third party or permit any third party to reproduce or copy or otherwise use or see the Property in any form and shall use all reasonable efforts to ensure that no
improper or unauthorized use of the Property is made. Customer shall not reverse engineer or de-compile any Property. Customer will promptly, upon termination of this Schedule or upon the request of Level 3, deliver to Level 3 all such Property without retaining any copy or duplicate thereof.

6. **Customer Policy.** If Professional Services are to be performed on Customer's premises, Customer hereby grants Level 3 such access and Level 3 shall comply with all Customer access policies, including, but not limited to, working hours and all safety and security regulations and policies in effect at Customer's facilities, provided such policies are provided to Level 3 with reasonable advance notice prior to Level 3's entry upon the premises.

7. **Letter of Agency.** If applicable, upon the incorporation of this Schedule into a master agreement (regardless of the agreement title) or execution of an applicable Exhibit A, Customer shall give Level 3 the limited authority to directly notify the appropriate vendor for the purpose as specifically identified in a letter mutually agreed upon by the parties. Customer may terminate this authorization at any time upon notice to Level 3. If applicable, Customer shall also provide its vendors with a letter (with a copy to Level 3) acknowledging Level 3's role as Customer's agent solely as it relates to the purpose as specifically identified in such letter of agency. As soon as commercially practicable, Customer shall provide Level 3 with a copy of any contractual commitments between Customer and its vendor that Level 3 must be aware of or comply with in order to dispatch such vendor accordingly.

8. **Warranty.** Level 3 warrants that its Professional Services provided pursuant to this Schedule will be of a good and workmanlike quality conforming to generally accepted industry standards and practices. ANY BFTS IS PROVIDED ON AN "AS-IS" BASIS AND LEVEL 3 MAKES NO OTHER WARRANTIES ABOUT THE PROFESSIONAL SERVICES PROVIDED HEREUNDER, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. LEVEL 3 DISCLAIMS ANY WARRANTY TO PREVENT UNAUTHORIZED USE OF THE SYSTEM. For any breach of the above warranty, Customer's exclusive remedy, and Level 3's entire liability, shall be the reperformance of the deficient Professional Services. In order to receive warranty remedies, deficiencies in the Professional Services must be reported to Level 3 in writing within ninety (90) days of completion of those Professional Services.

9. **Non-Solicitation of Employees.** During performance of the Professional Services and for a period of one (1) year following termination of this Schedule or completion of the Professional Services, Customer agrees not to solicit any of Level 3's personnel who perform Professional Services under this Schedule for any reason, unless written consent is received from Level 3. If a Level 3 employee who has provided service hereunder voluntarily terminates his or her employment with Level 3 within six (6) months of performing Professional Services, Customer shall not solicit such former Level 3 employee for six (6) months from the date of termination of employment. Provided, however, the parties agree that the restrictions set forth in this section shall not apply to solicitations directed at the public in general or to the retention of the services of an individual as a consequence of that individual responding to such a public solicitation.

10. **Order of Precedence.** In the event of conflict between the terms in this Schedule and the terms of any Exhibit A, the terms of Exhibit A will prevail.

11. **Limitation of Liability.** In no event shall Level 3's liability for Professional Services under this Schedule exceed the fees paid to Level 3 for the applicable Professional Services.
EXHIBIT A-_

Statement of Work
(Sample format)

1. Project
2. Project Management
3. Consulting & Implementation Services
4. Network Monitoring & Management Services
5. Field Tech Services
6. Change Order
7. Pricing
8. Terms of Services

IN WITNESS WHEREOF, the parties have executed this Exhibit A-__ as of the date written below by a representative empowered to bind that party with respect to the undertakings and obligations contained herein:

LEVEL 3 COMMUNICATIONS, LLC ("Level 3")

By ____________________________
Name __________________________
Title __________________________

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY ("Customer")

By ____________________________
Name __________________________
Title __________________________
MEMORANDUM

TO: Gerry Chenault
FROM: Tracey Gallagher
SUBJECT: Level 3 Communications, LLC MSA Supplement for Professional Services
DATE: August 28, 2009

My recommendation to the captioned matter is as follows:

_____ Approved as to form and execution*

X  Approved with recommended changes as noted below

_____Not approved for reasons indicated below

COMMENTS:

I noted Jeff's changes and, in addition, modified section 9 of the service schedule.

Please call me if you have any questions or concerns.

*The following should not be understood as an official opinion of the Attorney General nor construed as an endorsement of the terms/conditions of the referenced agreement. This review addresses only the legal authority of the Commonwealth to enter into this agreement and the enforceability of its terms; the wisdom of the agreement is by law addressed to the sound discretion of responsible officials of the institution/agency.

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution
SERVICE SCHEDULE
LEVEL 3® PRIVATE LINE SERVICE – IRU
(Version Issue Date: June 1, 2006)

1. **Applicability.** This Service Schedule is applicable only where Customer orders Level 3® Private Line Service on an IRU basis. This Service Schedule does not apply to any Off-Net Local Loop provisioned by Level 3 through a third party provider for the benefit of Customer, such Off-Net Local Loop would subject to the Level 3 Private Line Service Schedule executed between the parties (or if none, the then current standard version of Level 3’s Level 3 Private Line Service Schedule shall apply). Level 3® Private Line Lease Service may be designated as (3)Link® Private Line Service in customer orders, order acceptance, service delivery, billing (and related) documents.

2. **Definitions.** Any capitalized terms used herein and not otherwise defined shall have the meaning set forth in the Agreement.

   (A) “Deposit” shall mean an amount equal to twenty-five percent (25%) of the non-recurring IRU charge for any Level 3 Private Line Service purchased hereunder.

   (B) “IRU” shall mean an indefeasible (except as otherwise provided herein) right to use Level 3 Private Line Service purchased under this Service Schedule.

   (C) “Protected” shall mean any Service that includes a protection scheme that allows traffic to be re-routed in the event of a fiber cut or equipment failure.

   (D) “Submarine” shall mean any Service that transits any portion of Level 3’s trans-oceanic network.

   (E) “Terrestrial” shall mean any Service that generally transits Level 3’s land-based network (with limited water crossings, including, without limitation, bay and channel crossings) and does not in any way transit Level 3’s trans-oceanic network.

   (F) “Unprotected” shall mean any Service that does not include a protection scheme that would allow traffic to be re-routed in the event of a fiber cut or equipment failure.

3. **Service Description.** Level 3 Private Line Service is a dedicated, non-switched, point to point circuit between two (2) specified locations.

4. **IRU Grant.**

   (A) Commencing with the Service Commencement Date and continuing through the end of the Service Term, Level 3 will grant to Customer an indefeasible right of use pursuant to the terms and conditions of the Agreement and this Service Schedule in any Level 3 Private Line Service provided on an IRU basis as identified in a Customer Order submitted by Customer and accepted by Level 3.

   (B) Upon the expiration of the initial Service Term respecting any Level 3 Private Line Service provided on an IRU basis, the IRU for the particular Level 3 Private Line Service shall revert to a month-to-month lease subject to the Level 3 Private Line Service Schedule executed between the parties (or if none, the then current standard version of Level 3’s Level 3 Private Line Service Schedule shall apply), and the Service Term shall continue until terminated by either party upon thirty (30) days’ prior written notice to the other party. The monthly recurring charges for the Level 3 Private Line Service under the month-to-month lease shall be based on Level 3’s then current monthly recurring charges for Level 3 Private Line Service leases. Upon termination, all rights to the use of the Level 3 Private Line Service therein shall revert to Level 3 without reimbursement of any of the non-recurring IRU charge or other sums, costs, fees or expenses previously paid with respect thereto, and from and after such time Customer shall have no further rights or obligations hereunder with respect thereto unless such rights or obligations are specifically provided herein to survive the Service Term.

5. **Charges.**

   (A) The charges for each Level 3 Private Line Service consist of three (3) components: (1) a non-recurring installation charge payable pursuant to Section 5(B); (2) a non-recurring IRU charge payable
pursuant to Section 5(C); and (3) an annual recurring O&M charge payable pursuant to Section 5(D).

(B) For each Level 3 Private Line Service provided on an IRU basis, Customer agrees to pay to Level 3 the non-recurring installation charge set forth in the Customer Order applicable to such Level 3 Private Line Service. Such non-recurring installation charge shall be due (regardless of whether Level 3 issues an invoice) within five (5) days of Customer's receipt of the Customer Welcome Letter respecting such Level 3 Private Line Service.

(C) For each Level 3 Private Line Service provided on an IRU basis, Customer agrees to pay to Level 3 the non-recurring IRU charge set forth in the Customer Order applicable to such Level 3 Private Line Service. The Deposit for any purchase of Level 3 Private Line Service shall be due (regardless of whether Level 3 issues an invoice) within five (5) days of Customer's receipt of the Customer Welcome Letter; the balance of the non-recurring IRU charge shall be invoiced by Level 3 at the time that the Connection Notice for such Level 3 Private Line Service is delivered.

(D) (1) For each Level 3 Private Line Service provided on an IRU basis, Customer agrees to pay to Level 3, commencing with the applicable Service Commencement Date and continuing until the expiration of the applicable Service Term, an annual recurring O&M charge as set forth in the Customer Order ("O&M Charge"). The O&M Charge is intended to cover the expenses of supplying power, operations and maintenance services necessary to continue effective availability of the Level 3 Private Line Service for the Service Term.

(2) The O&M Charge shall be increased on each anniversary of the Service Commencement Date by the increase, if any, in the Consumer Price Index, All Urban Consumers (CPI-U), U.S. City Average, published by the United States Department of Labor, Bureau of Labor Statistics (1982-84 = 100), for the preceding twelve (12) month period. In the event such index shall cease to be computed or published, Level 3 may, in its reasonable discretion, designate a successor index to be used in determining any increase to the O&M Charge.

(3) The O&M Charge shall be invoiced annually (commencing on the Service Commencement Date and each year thereafter during the Service Term).

6. Interconnection.

(A) The demarcation point for any Level 3 Private Line (intercity) Service shall be the Level 3 OSX or fiber termination panel in the applicable Gateway(s). The demarcation point for any Level 3 Private Line (metropolitan) Service shall be as set forth in the applicable Customer Order.

(B) With respect to construction of Facilities to the Customer Premises and installation, maintenance and repair of Facilities within the Customer Premises, Customer shall provide Level 3 with access to and the use of Customer's entrance facilities and inside wiring, and/or shall procure rights for Level 3 allowing the placement of Facilities necessary for installation and delivery of the Level 3 Private Line Service to the Customer Premises. All costs associated with procuring and maintaining rights needed to obtain entry to the building (and the real property on which the building is located) within which the Customer Premises are located, and costs to procure and maintain rights within such building to the Customer Premises, shall be borne by Customer.

(C) Where necessary for the interconnection of Level 3 Private Line Service with services provided by others, Customer will provide Level 3 with circuit facility assignment information, firm order commitment information and the design layout records necessary to enable Level 3 to make the necessary cross-connection between the Level 3 Private Line Service and Customer's designated carrier. Any delay by Customer in providing such information to Level 3 may delay Level 3's provision of the necessary cross-connection. Notwithstanding any such delay in the provision of the cross-connection, billing for the Level 3 Private Line Service shall commence on the Service Commencement Date. Level 3 may charge Customer non-recurring and monthly recurring cross-connect fees to make such connection.

7. Route Portability.

(A) In the event that Customer purchases Level 3 Private Line Service under an IRU with an initial Service Term of five (5) years or longer, Customer may, upon at least ninety (90) days' prior written notice to Level 3, terminate its use of such Level 3 Private Line Service after the Service Commencement Date but prior to the end of the initial Service Term. Upon the effective date of such termination and following
Customer's payment of all charges due under Section 5, Customer shall be entitled to a credit (the “Portability Credit”) calculated as a percentage of the non-recurring IRU charge paid for such Level 3 Private Line Service based on the number of months following the Service Commencement Date as set forth in the following table:

<table>
<thead>
<tr>
<th># of Months</th>
<th>% Applied as Credit</th>
<th># of Months</th>
<th>% Applied as Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80%</td>
<td>16</td>
<td>53.3%</td>
</tr>
<tr>
<td>2</td>
<td>78.2%</td>
<td>17</td>
<td>51.7%</td>
</tr>
<tr>
<td>3</td>
<td>76.4%</td>
<td>18</td>
<td>50%</td>
</tr>
<tr>
<td>4</td>
<td>74.5%</td>
<td>19</td>
<td>48.3%</td>
</tr>
<tr>
<td>5</td>
<td>72.7%</td>
<td>20</td>
<td>46.7%</td>
</tr>
<tr>
<td>6</td>
<td>70.9%</td>
<td>21</td>
<td>45%</td>
</tr>
<tr>
<td>7</td>
<td>69.1%</td>
<td>22</td>
<td>43.3%</td>
</tr>
<tr>
<td>8</td>
<td>67.3%</td>
<td>23</td>
<td>41.7%</td>
</tr>
<tr>
<td>9</td>
<td>65.5%</td>
<td>24</td>
<td>40%</td>
</tr>
<tr>
<td>10</td>
<td>63.6%</td>
<td>25</td>
<td>38.3%</td>
</tr>
<tr>
<td>11</td>
<td>61.8%</td>
<td>26</td>
<td>36.7%</td>
</tr>
<tr>
<td>12</td>
<td>60%</td>
<td>27</td>
<td>35%</td>
</tr>
<tr>
<td>13</td>
<td>58.3%</td>
<td>28</td>
<td>33.3%</td>
</tr>
<tr>
<td>14</td>
<td>56.7%</td>
<td>29</td>
<td>31.7%</td>
</tr>
<tr>
<td>15</td>
<td>55%</td>
<td>30</td>
<td>30%</td>
</tr>
<tr>
<td>31</td>
<td>28.3%</td>
<td>46</td>
<td>7.5%</td>
</tr>
<tr>
<td>32</td>
<td>26.7%</td>
<td>47</td>
<td>6.3%</td>
</tr>
<tr>
<td>33</td>
<td>25%</td>
<td>48</td>
<td>5%</td>
</tr>
<tr>
<td>34</td>
<td>23.3%</td>
<td>49</td>
<td>5%</td>
</tr>
<tr>
<td>35</td>
<td>21.7%</td>
<td>50</td>
<td>5%</td>
</tr>
<tr>
<td>36</td>
<td>20%</td>
<td>51</td>
<td>5%</td>
</tr>
<tr>
<td>37</td>
<td>18.8%</td>
<td>52</td>
<td>5%</td>
</tr>
<tr>
<td>38</td>
<td>17.5%</td>
<td>53</td>
<td>5%</td>
</tr>
<tr>
<td>39</td>
<td>16.3%</td>
<td>54</td>
<td>5%</td>
</tr>
<tr>
<td>40</td>
<td>15%</td>
<td>55</td>
<td>0%</td>
</tr>
<tr>
<td>41</td>
<td>13.8%</td>
<td>56</td>
<td>0%</td>
</tr>
<tr>
<td>42</td>
<td>12.5%</td>
<td>57</td>
<td>0%</td>
</tr>
<tr>
<td>43</td>
<td>11.3%</td>
<td>58</td>
<td>0%</td>
</tr>
<tr>
<td>44</td>
<td>10%</td>
<td>59</td>
<td>0%</td>
</tr>
<tr>
<td>45</td>
<td>8.8%</td>
<td>60</td>
<td>0%</td>
</tr>
</tbody>
</table>

The Portability Credit shall be calculated based only on the non-recurring IRU charge paid for such Level 3 Private Line Service and no portion of the non-recurring installation charge or the annual recurring O&M charge paid by Customer shall be refunded, rebated or credited. The Portability Credit shall be made available to Customer upon the effective date of termination of the applicable Level 3 Private Line Service. Customer may thereafter use the Portability Credit as a credit against the non-recurring IRU charge otherwise applicable to Customer’s purchases of additional Level 3 Private Line Service under this Service Schedule for a minimum five (5) year IRU Service Term; provided, however, that (i) a maximum of fifty percent (50%) of the non-recurring IRU charge (including any Deposits, if due) for additional Level 3 Private Line Service may be paid by application of any Portability Credit and a minimum of fifty percent (50%) of the non-recurring IRU charge (or any Deposits, if due) for such Level 3 Private Line Service must be paid in cash; and (ii) the Portability Credit must be used within two (2) years after termination of the Level 3 Private Line Service for which the Portability Credit was granted. Any Portability Credit that is not applied against purchases of additional Level 3 Private Line Service within such period shall be forfeited.

(B) This Section 7 sets forth Customer’s sole right to terminate for convenience any Level 3 Private Line Service. As such, the parties acknowledge and agree that Section 3.7 of the Agreement shall not apply to any Level 3 Private Line Service provided on an IRU basis pursuant to this Service Schedule.

8. Use of Capacity.
(A) Level 3 reserves the right (but shall not be obligated) to transfer any Level 3 Private Line Service from one transmission system to another upon reasonable advance notice to Customer. Such transfer shall be effected in such a way as to minimize, to the extent reasonably possible, the extent and duration of any disruption in the operation of the Level 3 Private Line Service. If any planned transfer of the Level 3 Private Line Service from one transmission system to another will adversely affect Customer’s schemes for system diversity along the Level 3 Private Line Service between Gateways, Level 3 and Customer agree to work together so as to preserve, to the extent feasible, Customer’s diversity requirements.

(B) Customer acknowledges and agrees that its rights are limited to the use of the Level 3 Private Line Service only, and that Customer shall keep the Level 3 network free from any liens, rights or claims of any third party attributable to Customer.

(C) Customer shall not use the Level 3 Private Line Service in a way which interferes in any way with or otherwise adversely affects the use of the Level 3 network by any other entity using the Level 3 network or capacity therein.

9. Service Levels.

(A) Installation Service Level. Level 3 will exercise commercially reasonable efforts to install any Level 3 Private Line Service on or before the Customer Commit Date specified for the particular Level 3 Private Line Service. This Installation Service Level shall not apply to Customer Orders that contain incorrect information supplied by Customer, Customer Orders that are altered at Customer’s request after submission and acceptance by Level 3. In the event Level 3 does not meet this Installation Service Level for a particular Level 3 Private Line Service for reasons other than an Excused Outage, Customer will be entitled to a service credit of the non-recurring IRU charge for the affected Level 3 Private Line Service as set forth in the following table:

<table>
<thead>
<tr>
<th>Installation Delay Beyond Customer Commit Date</th>
<th>Service Level Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 10 business days</td>
<td>1%</td>
</tr>
<tr>
<td>11 - 30 business days</td>
<td>3%</td>
</tr>
<tr>
<td>31 business days or greater</td>
<td>5%</td>
</tr>
</tbody>
</table>

(B) Availability Service Level for Protected Level 3 Private Line Service. (1) The Availability Service Level for Protected Level 3 Private Line Service delivered over Level 3’s network is 99.99% for Protected Terrestrial Level 3 Private Line Service and 99.9% for Protected Submarine Level 3 Private Line Service. In the event that any Protected Level 3 Private Line Service becomes unavailable (as defined below) for reasons other than an Excused Outage, Customer will be entitled to a service credit of the annual O&M Charge (as defined in Section 5(C)) for the affected Protected Level 3 Private Line Service based on the cumulative unavailability of the affected Protected Level 3 Private Line Service in a given calendar month as set forth in the following table:

<table>
<thead>
<tr>
<th>Cumulative Unavailability (in hrs:mins:secs)</th>
<th>Service Level Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00:01 - 00:05:00</td>
<td>No Credit</td>
</tr>
<tr>
<td>00:05:01 - 00:45:00</td>
<td>5% of annual O&amp;M Charge (applicable to the affected Level 3 Private Line Service)</td>
</tr>
<tr>
<td>00:45:01 - 04:00:00</td>
<td>15% of annual O&amp;M Charge (applicable to the affected Level 3 Private Line Service)</td>
</tr>
</tbody>
</table>
For purposes of this Section 9(B), "unavailable" or "unavailability" means the duration of a break in transmission measured from the first of ten (10) consecutive severely errored seconds ("SESs") on the affected Level 3 Private Line Service until the first of ten (10) consecutive non-SESs. An SES is a second with a bit error ratio of greater than or equal to 1 in 1000.

(2) Without prejudice to Customer's right to service credits pursuant to subsection (1) above, if the Level 3 Private Line Service is provided in Germany, then the Availability Service Level for such Level 3 Private Line (On-Net) Service is 99.9% (based on a calendar month).

(C) Availability Service Level for Unprotected Level 3 Private Line Service. (1) In the event that any Unprotected Level 3 Private Line Service becomes unavailable (as defined in Section 9(B) above) for reasons other than an Excused Outage, Customer will be entitled to a service credit off of the annual O&M Charge (as defined in Section 5(C)) for the affected Unprotected Level 3 Private Line Service based on the cumulative unavailability of the affected Unprotected Level 3 Private Line Service in a given calendar month as set forth in the following table:

<table>
<thead>
<tr>
<th>Cumulative Unavailability (in hrs:mins:secs)</th>
<th>Service Level Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00:01 - 24:00:00</td>
<td>No Credit</td>
</tr>
<tr>
<td>24:00:01 - 30:00:00</td>
<td>2% of annual O&amp;M Charge (applicable to the affected Level 3 Private Line Service)</td>
</tr>
<tr>
<td>30:00:01 - 36:00:00</td>
<td>4% of annual O&amp;M Charge (applicable to the affected Level 3 Private Line Service)</td>
</tr>
<tr>
<td>36:00:01 - 42:00:00</td>
<td>6% of annual O&amp;M Charge (applicable to the affected Level 3 Private Line Service)</td>
</tr>
<tr>
<td>42:00:01 or greater</td>
<td>10% of annual O&amp;M Charge (applicable to the affected Level 3 Private Line Service)</td>
</tr>
</tbody>
</table>
(D) **Limitation.** The amount of credit granted under Sections 10(B) and (C) shall not exceed one hundred percent (100%) of the annual O&M Charge for the affected Protected Level 3 Private Line Service and ten percent (10%) of the annual O&M Charge for the affected Unprotected Level 3 Private Line Service during the applicable month. Credits provided under Sections 10(B) and (C) may be used against payment of the non-recurring IRU charge otherwise due for the purchase of any Level 3 Private Line Service, or may be offset against the next following annual recurring O&M charge due hereunder.
Professional Services

Basic Field Tech Services Description

Version Issue Date July 07, 2008
# TABLE OF CONTENTS

1.0 PRODUCT OVERVIEW ................................................................. 3
   1.1 PURPOSE .................................................................................. 3
   1.2 BASIC FIELD TECH SERVICES OVERVIEW ................................. 3
   1.3 LOCATIONS DEFINED .................................................................. 4
   1.4 SERVICE LEVELS ........................................................................ 4

2.0 BASIC FIELD TECH SERVICES PRICING .................................... 5

3.0 ORDERING BASIC FIELD TECH SERVICES ................................. 5
   3.1 INITIATING BASIC FIELD TECH SERVICES DISPATCH ................. 5
   3.2 CUSTOMER RESPONSIBILITIES ............................................... 6

4.0 BASIC FIELD TECH SERVICES .................................................. 6
   4.1 ON-DEMAND MAINTENANCE .................................................. 6
   4.2 SCHEDULED MAINTENANCE AND INSTALLS ......................... 8

ATTACHMENT A – FIELD TECH SERVICES REQUEST FORM ................. 9

Confidential and Proprietary Information of Level 3 Communications, LLC ("Level 3"). Reproduction and/or distribution of this material or the information contained herein, without the prior written consent of Level 3, is strictly prohibited. Level 3 makes no representations as to the accuracy of the information contained in this material, portions of which may be based upon future projections or events, and all of which is subject to change without notice.
1.0 Product Overview

1.1 Purpose

The Basic Field Tech Services Description document serves as the guide for customers who wish to initiate Basic Field Tech Services at Level 3 Tier 1, Tier 2, Running Line/ILA or Outreach locations (as such sites are defined by Level 3) that are covered under a Level 3 Professional Services Service Schedule. This document is a supplement to the master agreement(s) and service schedule(s) applicable to the type of service(s) (regardless of the service name), if any, between Level 3 and Customer ("Level 3 MSA"). Basic Field Tech Services enables customers to utilize Level 3 Field technicians to support their network maintenance requests 24 hours a day, 7 days a week and 365 days a year at Level 3 locations and approved Outreach locations. Customers who wish to initiate BFTS at Level 3 Tier 1 or Tier 2 locations must execute a Level 3 MSA which shall include a Professional Services Service Schedule. Customers who wish to initiate BFTS at Level 3 Running-Line (i.e. ILA, Re-Gen, 3R) sites or approved Outreach locations must, in addition to executing a Level 3 MSA including a Professional Services Service Schedule, execute a Professional Services SoW.

This Basic Field Tech Services Description document supersedes all previous forms of Basic Field Tech Services (regardless of the previous service name or the service schedule under which they are provided) that customers are currently receiving from Level 3 that are described in this Basic Field Tech Services Description. The superseded services include, but are not limited to, (3) Tech, Tech Services, Remote Hands and Technical Assistance.

1.2 Basic Field Tech Services Overview

Basic Field Tech Services ("BFTS") is available to all Level 3 Colocation customers in Tier 1 (Gateway & Mondo Condo) and Tier 2 (Synergy) sites, Running Line/ILA and approved Outreach locations.

The BFTS offering is comprised of two primary service types:

- **On-Demand**: Customers can use BFTS to respond to their service-affecting maintenance needs with an "on-demand" ticket. Level 3 technicians are available to provide immediate on-site support to help return customers' existing services/network to normal operating environment.

- **Scheduled**: In addition to on-demand support, customers can leverage BFTS to perform scheduled activities within their network. All "scheduled" activities require a minimum of 72 hours notice, and may include, but are not limited to, non-service affecting and preventive maintenance, equipment and software installation and testing.

A more detailed description of these services is provided below in Section 4.0.
1.3 Locations Defined

For the purposes of providing BFTS, Level 3 locations are categorized according to market conditions, volumes, and available resources. The four (4) primary categories include Tier 1, Tier 2, Running Line/ILA and Outreach sites. More detailed descriptions are provided below.

| Tier 1 (Large Gateways, Mondo Condos) | Tier 1 sites are staffed facilities that typically include Gateway sites in North America and Europe, and are facilities that have higher staffing levels due to market demand and volume of all Level 3 products. Response time SLAs are more aggressive in these locations. |
| Tier 2 (Small Gateways, Synergy) | Tier 2 sites are staffed facilities that typically include Level 3's Synergy sites in North America and Europe, but have a lower level of staffing to reflect market demand and overall Level 3 product volumes. Response time SLAs are longer in these locations. |
| Running Line / ILAs | Facilities (including regeneration and op-amp facilities but excluding Gateways and Synergy sites) that are owned, leased or otherwise used by Level 3 to regenerate the signal of lit fibers or optically amplify lit fibers in the Level 3 system. |
| Outreach Locations | Generally non-staffed facilities and typically include on-net POPs, former Genuity sites etc. Outreach locations can also include off-net sites when the local division has determined that coverage is possible and appropriate given the local market conditions and resources. |

1.4 Service Levels

Response Time Service Level: The Response Time Service Level for BFTS unscheduled, basic on-demand maintenance and support is as set forth below. This Response Time Service Level shall not apply to any BFTS that is for scheduled support, maintenance, installation or removal. This Response Time Service Level is measured from the time the Level 3 Service Management Center ("SMC") receives and logs the customer's BFTS request with all of the necessary information requested by the Level 3 SMC until a Level 3 technician is dispatched in response to the particular request. In the event Level 3 does not meet the following Response Time Service Level for reasons other than an Excused Outage (as defined in the Level 3 MSA) ("SLA Failure"), customer will be entitled to a service credit equal to $100 per hour for each hour beyond the Response Time Service Level (capped at $400.00 per location per month) upon Level 3's receipt of customer's written request for such service credit. Such written request must be received by Level 3 within thirty (30) calendar days of the SLA Failure. Upon Level 3's review and confirmation of the SLA Failure, any service credit Level 3 deems to be owed shall be applied to the customer's next monthly invoice. If Level 3 does not receive the customer's written notice within such thirty (30) calendar day period, the customer shall be deemed to waive their right to the service credit.

<table>
<thead>
<tr>
<th>BFTS On-Demand Service Level Agreement (SLA) Response Times</th>
<th>Business Hours</th>
<th>After Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 (Gateways)</td>
<td>2 hours</td>
<td>2 hours</td>
</tr>
<tr>
<td>Tier 2 (Synergy Sites)</td>
<td>2 hours</td>
<td>4 hours</td>
</tr>
<tr>
<td>Running Line / Outreach Locations</td>
<td>4 hours</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

Business Hours are defined as Monday-Friday 8:00 a.m. - 5:00 p.m. local time
After Hours are defined as Monday-Friday 5:01 p.m. - 7:59 a.m. local time, Saturdays, Sundays and Level 3 Holidays
2.0 Basic Field Tech Services Pricing

Hourly rates and retainer fees are in support of BFTS On-Demand and Scheduled maintenance services as described herein.

<table>
<thead>
<tr>
<th></th>
<th>Business Hours</th>
<th>After Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scheduled</td>
<td>On-Demand</td>
</tr>
<tr>
<td>Tier 1 &amp; Tier 2</td>
<td>$200</td>
<td>$250</td>
</tr>
<tr>
<td><em>Running Line / ILA and Outreach Locations</em></td>
<td>$300</td>
<td>$350</td>
</tr>
</tbody>
</table>

* Monthly Retainer fees apply to all Running Line / ILA and Outreach Locations $300

All dispatches are billed in 15-minute increments with no minimums.

Business Hours are defined as Monday-Friday 8:00 a.m. - 5:00 p.m. local time
After Hours are defined as Monday-Friday 5:01 p.m. - 7:59 a.m. local time, Saturdays, Sundays and Level 3 Holidays

Incidental Costs. All incidental costs including, but not limited to, shipping, consumables, use of freight elevators and any parts that are required to support a Customer service request and purchased by a Technician will be billed to Customer at Level 3’s cost plus ten (10) percent. If necessary, the Technician will travel no more than thirty (30) miles, one way, from the applicable Customer site to obtain replacement parts ("Parts Travel"). The Technician’s time for Parts Travel and to process shipment of defective hardware will be included in the total dispatch time and charged at the hourly rates set forth above. At the sole discretion of Level 3, courier services may be used instead of Parts Travel and billed to Customer as incidental costs as set forth above.

Second Site Visit. If Level 3 cannot perform the requested Field Services due to either (i) a replacement part being DOA or (ii) Level 3 responds to the site and has to reschedule due to no fault of Level 3, Level 3 shall treat the subsequent response to the site as a separate service request and Customer will be charged the applicable hourly rate as set forth above.

Cancellation of Service Request. Customer may cancel any service request at any time; however, any costs incurred by Level 3 shall be billed to Customer in accordance with Section 2.

3.0 Ordering Basic Field Tech Services

3.1 Initiating Basic Field Tech Services Dispatch

Customers who wish to initiate a BFTS dispatch must open a ticket through the Level 3 Transport Service Management Center ("SMC"). To initiate a ticket, the following steps must be taken:

1. Complete the customer "Field Tech Services Request Form" (see Attachment A) and email to WMG3TECH@Level3.com.
2. Customer must call the Level 3 SMC Technical Customer Account Manager ("TCAM") at (877) 453-8353 or (720) 888-0024 to open a new BFTS ticket. Customer will be prompted to select a service type from a number of options (i.e., option 2 to initiate a new ticket; option 3 for status of a open ticket).
3. Customer must identify whether they are requesting BFTS support at a Tier 1, Tier 2, Running Line or Outreach locations and identify the specific location where they are requesting a dispatch.
4. Customer must identify whether the ticket is an On-Demand or a Scheduled service request.
5. Ticket Number (Clarify case) will be provided to customer at time of request.
3.2 Customer Responsibilities

1. If the customer is requesting equipment installation/replacement/decommission:
   - Customer must email a Method of Procedure ("MOP") before a BFTS ticket can be opened.
   - Customer must deliver a MOP via email (and email only) to WMG3TECH@Level3.com.
   - A Level 3 Field Services technician will review the MOP within 24 hours and contact the customer with any questions.

2. If the customer is requesting any kind of service requiring parts or materials, the customer must either:
   - Have all materials and parts onsite, OR
   - Be able to provide a tracking number for a shipment with all materials and parts required to perform the work before a BFTS ticket is opened, OR
   - If the customer did not ship all required parts, Level 3 can use consumables provided they are available at the site where the work is being done.

4.0 Basic Field Tech Services

Level 3 Basic Field Tech Services are available to all Level 3 Tier 1 and Tier 2 site colocation customers as well as Running Line/ILA and approved Outreach locations. The BFTS offering is comprised of On-Demand and Scheduled maintenance and support services.

Note: Basic Field Tech Services will only be provided to, and at the request of, the Level 3 customer of record for the colocation space.

- On-Demand: Customers can use BFTS to respond to their service-affecting maintenance needs with an “on-demand” ticket. GFS techs are available to provide immediate on-site support to help return customers’ existing services/network to a normal operating environment.
- Scheduled: In addition to on-demand support, customers can leverage BFTS to perform scheduled activities within their network. All “scheduled” activities require a minimum of 72 hours notice, and include non-service affecting and preventive maintenance, equipment and software installation, testing, etc.

4.1 On-Demand Maintenance

On-Demand BFTS can be used to respond to a customer’s service-affecting maintenance needs with a BFTS “on-demand” ticket. In the event of a network emergency, Level 3 technicians provide immediate on-site support, troubleshooting and repair activities to help return a customer’s existing services/network to a normal operating condition. On-Demand Tech Services activities are dispatched to the Field and are executed under the Service Levels defined in Section 1.4 above.

On-Demand services are sent to the local field staff as a dispatched ticket in Level 3’s Clarify ClearSupport. On-Demand activities are typically initiated by a network-impacting situation requiring immediate “on-demand” repair or maintenance, and include but are not limited to:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Required Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troubleshooting</td>
<td>Assist the customer in determining the source of an outage.</td>
<td>Description of outage; Customer direction</td>
</tr>
<tr>
<td>Power Cycle</td>
<td>Power restarts and cycling at the customer direction.</td>
<td>Customer direction</td>
</tr>
<tr>
<td>Cable Swap</td>
<td>Swap and reconnect cables; replace or fabricate and install new cable as required.</td>
<td>Customer direction</td>
</tr>
<tr>
<td>Basic Field Tech Services Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Visual Verifications</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relay to customer LED status or display readout</td>
<td>Customer direction</td>
<td></td>
</tr>
<tr>
<td><strong>Reseat / Remove and Replace</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reseat / remove and replace card / module / power supply / drive, etc.</td>
<td>Customer direction</td>
<td></td>
</tr>
<tr>
<td><strong>Testing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNR Service Activation – Activating service (following CNR at initial circuit turn-up) after-hours or on a weekend.</td>
<td>Customer direction</td>
<td></td>
</tr>
<tr>
<td><strong>Escorts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escort customer or customer’s vendor into their space for equipment installation, repair, maintenance, testing, etc.</td>
<td>Customer coordination</td>
<td></td>
</tr>
</tbody>
</table>
4.2 Scheduled Maintenance and Installs

Scheduled BFTS can be leveraged to perform planned activities on a customer’s network, and typically include services such as scheduled maintenance, preventive maintenance, equipment and software installation and testing.

Scheduled BFTS work requires a minimum of 72 hours advance notice. Any BFTS task performed with less than 72 hours notice from the customer will be considered and billed as an On-Demand service regardless of the type of activity requested to be performed. If a customer requests Scheduled BFTS activities to be performed with less than 72 hours notice, the request will be subjected to the Level 3 Workforce Management ("WFM") short interval process to determine the local division’s ability to accommodate the expedited request based on available local resources. Level 3 will notify the customer whether such request can be accommodated.

Scheduled BFTS activities may include, but are not limited to:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory or Data Audit</td>
<td>Conduct an equipment inventory or audit on behalf of the customer, and to their specifications.</td>
<td>Customer MOP</td>
</tr>
<tr>
<td>Shipping and Receiving</td>
<td>Returning equipment to customer (customer provides labels and materials). Note: The customer equipment receipt process must be used for all customer shipments.</td>
<td>Customer direction</td>
</tr>
</tbody>
</table>
| Testing                      | • Extended Testing – Bit Error Rate testing ("BER") of services for durations longer than Level 3's established standard.  
  • Out-of-Scope Testing – Perform optical return loss (ORL), chromatic dispersion (CD), polarization mode dispersion (PMD), round trip delay (RTD) / latency / cell transfer delay (CTD). | Customer MOP                  |
| Preventive / Basic Maintenance | Dust, clean or change filters, labeling, etc.                                  | Customer MOP, if required     |
| Installation                 | • Install customer provided network equipment in their colocation space.  
  • Install basic logical configurations on customer equipment.  
  • Install intra-cabinet / intra-suite cabling. | Customer MOP                  |
| Back-up Functions            | • Hard Drive Back-up – Back-up data to customer-provided medium.  
  • Tape Swap – Swap data back-up tapes and store according to customer direction, as appropriate. | Customer direction            |
| Tertiary DC Cabling and Terminations | In this document, tertiary power is defined as DC power work within a customer colocation space. | Customer MOP                  |
**Attachment A – Field Tech Services Request Form**

**Field Tech Services Request Form**

1. Complete the form in full. Form will be rejected if Mandatory Yellow Fields are not completed.
2. Email completed form, along with any other required MOPs to WMG3TECH@level3.com.
3. For all requests under 72 hours, a phone call to Level 3 Service Management is required: (877) 453-8353; Option 2,1,3.
4. This form is for billable Tech Services work only.

**QUESTIONS:** Call Service Management at (877) 453--; Option 2,1,3. Local number: (720) 888-0024; Option 2,1,3.

<table>
<thead>
<tr>
<th>Customer Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billable Customer Name:</td>
</tr>
<tr>
<td>Requestor Name:</td>
</tr>
<tr>
<td>Requestor Phone #:</td>
</tr>
<tr>
<td>Customer Contact Name:</td>
</tr>
<tr>
<td>Customer Contact Phone #:</td>
</tr>
<tr>
<td>Customer Contact Secondary Name:</td>
</tr>
<tr>
<td>Customer Contact Secondary Phone #:</td>
</tr>
<tr>
<td>Customer Billing Account Number:</td>
</tr>
<tr>
<td>Customer Internal Ticket Number:</td>
</tr>
</tbody>
</table>

**Request Type:**

**Definitions:**

1. **Scheduled / Basic Installation activities** - This ticket type is to be selected for all audit/inventory requests, maintenance activities, equipment installation, testing, escort and cabling. A minimum 3 days advance notice is required for these scheduled activities.
2. **On Demand / Remedial Maintenance** - This ticket type is to be selected only for emergency activities that require less then 3 days advanced notice. A technician will be dispatched immediately or will be dispatched at appropriate time as dictated by customer. These dispatches include activities such as trouble shooting, card replacement, emergency escorts, etc.

**Select Request Type from Drop Down**

**Request Time:**

| Request Start Date/Time: | Request End Date/Time: |

**Request Details:**

| Request Description: | (Please be specific and include any special instructions or Test Equipment required.) |

**Site Name/CLLI Code**

| Address 1: |
| Address 2: |
| City, State, Zip: |
| Floor, Suite, Cabinet/Rack #, Equipment ID: |

**Shipping Details ***(if required)^

| Data shipped: |
| Addressed shipped to: |
| Tracking number(s): |
| Number of packages: |
| Sent to whose attention: |
| Provide date signed for and who signed: |
| If no, when will equipment be shipped? |
| Will you want Level3 to return any equipment to your company? |
| If so, you must provide shipping materials and a shipping label. Please specify: |
| Has a contact at the Level 3 site been established? If so, who? |

**RMA Details ***(if required)^

| RMA Number: |
| Part Name: |
| Part Number: |
| Serial Number: |

When shipping equipment to a Level 3 gateway, send it to:

- Your Company Name
- C/O Level 3 Communications or contact (if located at Gateway)
- Gateway Address

You must provide shipping materials and a shipping label. Please specify: