DC-CAN
Service Level Agreement

Date: 6/14/2011
Version: 1.0

Prepared by: DC-Net
## Table of Contents

1. **Service Level Agreement Scope** .......................................................................................................................... 3  
   1.1 **Network Overview** ............................................................................................................................................. 3  
   1.2 **Service Offerings** .................................................................................................................................................. 3  
   1.3 **Network Monitoring** ............................................................................................................................................. 4  
   1.4 **Reporting Outages** .................................................................................................................................................. 4  
   1.5 **Mean Time to Repair** ............................................................................................................................................... 4  
   1.5.1 **Response and Repair Process** .......................................................................................................................... 5  
   1.6 **Network Maintenance** ........................................................................................................................................... 6  
2. **Service Level Commitments** .......................................................................................................................................... 6  
   2.1 **Network Availability** ............................................................................................................................................... 6  
   2.2 **Bandwidth Guarantee** ............................................................................................................................................. 7  
   2.3 **Service Credit Conditions** ...................................................................................................................................... 7  
3. **Service Credit Exceptions** ............................................................................................................................................. 8  
4. **Premise Access and Environmentals** ............................................................................................................................ 9  
5. **Definitions** ................................................................................................................................................................. 10
1 Service Level Agreement Scope

This Service Level Agreement (SLA) applies to transport Services, including Ethernet and Wavelength, over the OCTO/DC-Net managed DC Community Access Network (DC-CAN).

It provides Service Level Commitments for:

- 99.999% availability
- Bandwidth on the DC-CAN network at the purchased capacity

1.1 Network Overview

The DC-CAN network extends from the network demarcation point between Customer sites or between a Customer and Service site. A network demarcation point is defined as the hand off of transport Services where Customer data is made available at the Customer premises and on the network side a location where the Service is either terminated, delivered to another carrier or customer premises site, or connected to a Service delivery apparatus. Service delivery apparatus can include:

- Cloud Service provision point
- Voice or video Service head end
- Content distribution point

The DC-CAN network includes the Customer’s access port and the DC-CAN backbone network. The backbone network includes all DC-Net-owned and operated electronics and fiber. The local Customer Premises Equipment or LAN does not constitute the DC-CAN network.

Network characteristics include:

- Redundant fiber path from any access point
- Core and access sites diversely located and dual homed

1.2 Service Offerings

The DC-CAN infrastructure provides multiple types of Services. The Service offering usually combines some or all of the following Service categories:

- Data
- Voice
- Internet
This Service Level Agreement covers the transport or Service delivery connectivity between the Service origination site and the Service delivery site. The SLA shall remain in full effect as long as DC-Net is responsible to provide Services.

1.3 Network Monitoring

DC-Net engineering staff and the District government managed Network Operations Center (DC-NOC) provide network monitoring and response.

The DC-NOC is staffed 24 hours a day, 7 days a week, 365 days a year. DC-Net Engineering operational hours are Monday through Friday, 7:00 AM to 7:00 PM.

1.4 Reporting Outages

An outage is any disruption to data transport Service. There are two basic conditions where a Customer can experience Service impairment:

- Fiber break or impairment to voice or data services utilizing the DC-CAN platform – DC-Net/DC-NOC become aware of these through monitoring systems almost instantaneously. No Customer reporting of the event is necessary for DC-Net/DC-NOC to begin troubleshooting and repair.
- Impairment at endpoint device (for example, PC or phone) – If no fiber break or network equipment failure has occurred Customer must report the Service impairment for DC-Net/DC-NOC to begin troubleshooting and repair.

Customer should report Service issues to the DC-Net Help Desk at 202-715-3733 or dccan.support@dc.gov.

1.5 Mean Time to Repair

DC-Net Mean Time to Repair (MTTR) commitments on verifiable transport Service outages are:

- Time to Respond – 1 hour (Confirmation by DC-Net/DC-NOC occurs within 1 hour – usually within 30 minutes. If dispatch is required, technician will be onsite within 2 hours.)
- Mean Time to Repair without dispatch – 4 hours
- Mean Time to Repair with dispatch – 8 hours
- Update Frequency – every 1 hour for transport outage.
Individual voice line trouble issues will be resolved within one business day from the initial report.

Dispatch occurs when DC-Net must send personnel to the site to evaluate and/or repair Services.

Time to repair begins when Customer reports the Service impairment or DC-Net/DC-NOC has otherwise become aware of an outage and DC-NOC/DC-Net enters it into the Trouble Ticketing system. Time to repair ends when DC-NOC/DC-Net confirms with Customer that Service is restored. This period shall be suspended for any period of time DC-Net must spend waiting for a response, availability, action, or access to the premises from Customer in furtherance of the repair effort, any period of time during which a “force majeure” event affecting Service has occurred and is continuing, or any other conditions as listed in “Service Credit Exceptions.”

Once an issue is reported to DC-Net/DC-NOC, Customer shall receive progress reports hourly.

If Customer does not receive a status update from DC-Net/DC-NOC within two hours, Customer may contact the DC-Net Help Desk at 202-715-3733 and request an escalation.

If DC-Net fails to meet the above MTTR Service commitment, Customer may request Service Credit as listed in Table 1.

### 1.5.1 Response and Repair Process

- DC-Net obtains time DC-Net/DC-NOC was called from incident management system and/or identified the outage through Customer report or proactive review of monitoring systems.
- DC-Net/DC-NOC responds within 30 minutes of Customer reporting a Service disruption.
- DC-Net verifies time of sectionalization of event cause through remote test access and/or on premise loss readings. Qualified fiber optic cable maintenance and engineering personnel conduct these readings under the direction and supervision of DC-Net management and communicate to DC-NOC, which acts as single point of contact for all status updates and progress evaluation.
- DC-Net verifies implementation of corrective action plan and projected resolution time frame to include total awareness and understanding of affected end user customers and progress updates by DC-NOC.
- DC-NOC logs time of initialization of restoral activities.
- DC-Net obtains the time of Service restoration from network monitoring system or Customer report and calculates restoration time as the interval between the failure and restoration per the network monitoring system, minus any period of time during which
a “force majeure” event affecting Service has occurred and is continuing, or any other conditions as listed in “Service Credit Exceptions.”

1.6 Network Maintenance

Time periods for Preventive and Corrective Maintenance are excluded from Service Level Commitment metrics.

**Preventive Maintenance:** Preventive Maintenance refers to upgrades of hardware or software or upgrades to increase capacity. Preventive Maintenance may temporarily degrade the quality of the Service including possible outages. Such effects related to Preventive Maintenance shall not give rise to Service Credits under this SLA. DC-Net will notify Customer in advance of Preventive Maintenance requirement and perform said service with customer scheduling concurrence.

**Corrective Maintenance:** Corrective Maintenance refers to efforts to correct network conditions that are likely to cause a material Service outage or that require immediate action. Corrective Maintenance may degrade the quality of the Service including possible outages. DC-Net may undertake Corrective Maintenance at any time deemed necessary by DC-Net. DC-Net will notify Customer in advance of Corrective Maintenance as is practicable under the circumstances and will only conduct such maintenance with Customer approval.

2 Service Level Commitments

Service Level Commitments shall provide an assurance in the following two important components: network availability and bandwidth.

2.1 Network Availability

DC-Net commits to provide availability each month of 99.999% for data transport on the DC-CAN network. The DC-CAN network is as defined in Section 1.1, “Network Overview.” Availability is not measured on the local access circuit or Customer LAN. Availability measurement also does not include Preventive Maintenance and Corrective Maintenance time periods, customer-caused outages or disruptions, interconnections to or from and connectivity within other Internet Service Provider (ISP) networks, or Force Majeure Events as listed in “Service Credit Exceptions.”

Any customer who experiences an outage (as defined earlier) is entitled to credit allowances as noted in the table below.
Compensation is provided by reduction of Monthly Recurring Cost (MRC) as follows. Compensation is capped at 100% of MRC for any single Service outage.

Table 1: Credits for Outages on On-Net Services

<table>
<thead>
<tr>
<th>Service Outage Length per Month</th>
<th>Credit per Circuit</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 minutes or less</td>
<td>None</td>
</tr>
<tr>
<td>Over 5 minutes to 60 minutes</td>
<td>2%</td>
</tr>
<tr>
<td>Over 60 minutes to 8 hours</td>
<td>5%</td>
</tr>
<tr>
<td>Over 8 hours to 16 hours</td>
<td>25%</td>
</tr>
<tr>
<td>Over 16 hours to 24 hours</td>
<td>50%</td>
</tr>
<tr>
<td>Over 24 hours</td>
<td>100%</td>
</tr>
</tbody>
</table>

2.2 Bandwidth Guarantee

DC-Net commits to provide the full advertised bandwidth capacity on data transport Services purchased by Customer. The measurement of available bandwidth shall extend from port to port on the circuit and shall be available for Customer use.

A measured reduction in the committed bandwidth shall result in a compensation gradient as follows.

Table 2: Bandwidth Capacity Credits

<table>
<thead>
<tr>
<th>Bandwidth Capacity</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>99.9%</td>
<td>One week of MRC</td>
</tr>
<tr>
<td>Less than or equal to 99%</td>
<td>One month of MRC</td>
</tr>
</tbody>
</table>

2.3 Service Credit Conditions

Service Credits, when payable, will be provided based on the extent of the outage and the loss of Service as per Table 1 and Table 2.

Requests for Service Credits for validly reported commitment failures must be sent via email to DC-Net at dccan.support@dc.gov. Requests must identify the Service Level Commitment at issue, including trouble ticket number assigned to Customer’s report, and include such other information that DC-Net may have reasonably requested to assist it in verifying the request. DC-Net may reject any Service Credit request that does not provide sufficient supporting information to allow DC-Net to verify the claim. All requests for Service Credits will be subject to confirmation by DC-Net, and will be applied by DC-Net as soon as possible to a subsequent
recurring invoice following approval. DC-Net shall promptly notify Customer of its resolution of the reported event. Customer must claim any applicable Service Credits by the 15th day of the month following the month in which the reported incident was resolved. DC-Net will inform Customer of credit requests rejected for insufficient information, and Customer will be allowed to resubmit such requests with additional supporting information within fifteen (15) days of DC-Net's notification of its rejection of the credit request. After Customer resubmits the credit request with the additional supporting information, the standard verification and crediting timelines outlined herein shall apply.

The maximum Service Credit to be granted for all failures within a given month shall not exceed 100% of recurring fees charged by DC-Net for the given Service for the month in which the given Service Credit is claimed. Any excess credits will not carry over into later invoices. Outages must impact over 20 percent of Customer’s premise network to be eligible for Service Credit.

Remedies available hereunder shall only be payable in the form of a Service Credit to Customer's account. DC-Net shall have no obligation to pay cash to Customer to fulfill any earned Service Credit, unless DC-Net's records verify that all Services have been terminated and authorized Service Credits remain outstanding which are in excess of any remaining amounts due and owing from Customer to DC-Net, and then, only to the extent of the excess amount.

If any event triggers a breach of two or more Service Level Commitments, Customer shall only receive a Service Credit equal to the highest applicable Service Credit being requested in connection with the breached Service Level Commitments.

Customer shall be ineligible for a Service Credit hereunder if Customer is not in financial good standing with DC-Net (i.e., current on all billings) at the time of the request.

The remedies set forth herein for each Service Level Commitment shall be the exclusive remedy available to Customer for DC-Net's failure to achieve such Service Level Commitment. This SLA does not represent a warranty or guarantee by DC-Net that Services will be uninterrupted or fit for any particular purpose or intended use of any kind, and DC-Net shall not be liable for any damages of any nature or amount as a result of any failure to achieve any Service Level Commitment, other than the permitted Service Credits authorized and described hereunder.

### 3 Service Credit Exceptions

This SLA applies to DC-Net Service and equipment only. If at any time Customer is in default under this agreement, then Customer will not be entitled to Service Credits. DC-Net will not be responsible for, and will not issue Service credits for, any failure by DC-Net to meet a Service
level commitment for any outage that, as determined by DC-Net in its reasonable judgment, results from downtime due to:

- Customer-initiated changes whether implemented by Customer or a vendor on behalf of Customer
- Customer exceeding system capacity
- Viruses
- Customer failure to adhere to DC-Net’s change management process and procedures
- Acts or omissions of Customer, its employees, agents, third party contractors or vendors, or anyone gaining access to DC-Net’s network through Customer site
- Any failures in DC-Net network equipment at Customer site due to Customer inadequately maintaining HVAC/environmental conditions at the site
- A “force majeure” event or any event or condition not wholly within the control of DC-Net
- The negligence or willful misconduct of Customer or others authorized by Customer to use the DC-Net Services
- Any Preventive or Corrective Maintenance periods.
- Any failures that cannot be corrected because Customer or Customer site is inaccessible.

4 Premise Access and Environmentals

Customer will ensure unencumbered access to DC-Net and its contracted personnel while performing Preventive and Corrective Maintenance and any other operation required for network repair or Service restoration.

Customer owns accountability for HVAC/environmental conditions all AC powering requirements meeting industry standards in premise areas housing DC-Net equipment. Environmental criteria supporting equipment warranty and operational/industry standards will be documented by DC-Net at the time of initial hardware/software installation.
5 Definitions

Availability – Network uptime. Availability is measured on traffic from the network demarcation point between Customer sites or between Customer and a Service site. It is not measured on the local access circuit or Customer LAN. Availability measurement also excludes Preventive Maintenance and Corrective Maintenance time periods, customer caused outages or disruptions, interconnections to or from and connectivity within other Internet Service Provider (ISP) networks, or Force Majeure Events (see Section 3, “Service Credit Exceptions”).

Bandwidth – Committed amount of capacity to deliver Services for Customer. As an example, Customer may purchase a 10 Mbps Internet Service. This ensures that Customer has dedicated 10 Mbps from the Service delivery point to the Service access point.

Business hours – 7 AM to 7 PM, Monday through Friday, except recognized District Government holidays.

Corrective Maintenance – Refers to efforts to correct network conditions that are likely to cause a material Service outage or that require immediate action.

Customer – Recipient of Service over DC-CAN.

DC-CAN (District of Columbia Community Access Network) – Open access network managed by DC-Net that provides broadband Service to last mile providers and community anchor institutions.

DC-Net – Program under the District of Columbia Office of the Chief Technology Officer (OCTO) that manages the District government owned DC-Net fiber-optic metropolitan area network and DC-CAN.

Force Majeure – Any natural disaster, act of God, power surge or failure, strike or labor dispute, war, civil disturbance, act of governmental authorities or the public enemy, act of terrorism, unavailability or failure of, or interruption or delay in, telecommunications or third party Service, fuel or energy shortage, or any other cause beyond DC-Net’s control, whether or not similar to the foregoing.

Non-business hours – Before 7 AM and after 7 PM, Monday through Friday, weekends, and recognized District Government holidays.

Preventive Maintenance – Refers to upgrades of network hardware or software or upgrades to increase network capacity.

Service – DC-CAN data, voice, or Internet Service purchased by Customer. Service begins when Customer begins utilizing bandwidth.
Service Outage – Begins upon DC-Net’s verification of a disruption of Service as reported by Customer or DC-Net/DC-NOC pursuant to DC-Net’s trouble ticketing procedures. Outage ends when Service is fully operative, excluding any delay experienced by DC-Net either waiting for additional Service information from Customer or access to Customer Premises or other applicable conditions as listed in Section 3, “Service Credit Exceptions.”

Time to Respond – Time it takes DC-Net/DC-NOC to identify an issue, create the trouble ticket, and actively work toward a solution.

Time to Repair – Time it takes from when Service impairment is reported (either by Customer or DC-Net/DC-NOC) until Service is restored, excluding any delays experienced by DC-Net either waiting for additional Service information from Customer or access to Customer Premises or other applicable conditions as listed in Section 3, “Service Credit Exceptions.”