



MASTER TERMS AND CONDITIONS

The following Master Terms and Conditions apply to related products licensed by NexGen Networks Corporation, where incorporated by reference in a contract or order form executed by NexGen Networks Corporation, and by the customer or licensee. These Master Terms and Conditions, shall govern all Service Orders between NexGen Networks Corporation ("NEXGEN") and (the "Customer"), upon execution of such Service Order by Customer and acceptance by NEXGEN. These Terms and Conditions together with the Service Orders shall be referred to herein as the "Agreement." NEXGEN and Customer are referred to herein as the "Parties" or individually as a "Party".

1. Ordering; Billing and Payment. (a) The services currently available from NEXGEN are listed on the attached Appendix 1, which may be updated from time to time by NEXGEN by notice to Customer. Each Customer order shall be documented by a Service Order, the form of which is attached hereto as Appendix 2. NEXGEN shall invoice Customers in advance for all charges (including non-recurring and monthly recurring). Invoicing may commence within five (5) days following Acceptance of the ordered service. Customers shall pay each invoice, less charges disputed in accordance with Section 1(b) of this Agreement, within thirty (30) days of the invoice date. The rates and charges contained in all invoices shall comply with all applicable laws and regulations. In the event Customer should fail to make any payment when due, Customer shall be liable to NEXGEN for a late charge on all past due amounts at the compounded rate of one and one-half percent (1.5%) per month (or such lower rate that is then the maximum rate allowed by law), calculated on a daily basis from the first day when said amount became due and owing until paid. In the event that Customer is overdue on its payment obligations hereunder, NEXGEN may, at its option and without liability, upon no less than ten (10) days prior written notice to Customer, suspend the circuits, services and/or work being delivered under the Agreement until Customer's account is current. All amounts due to NEXGEN are due and payable without set off. NEXGEN reserves the right to request financial information from Customer for the purpose of determining the creditworthiness of the Customer. NEXGEN may elect, in its sole discretion, to demand assurance of payment from Customer, including among other things the posting of a deposit and the executing of an agreement with NEXGEN regarding the use of any such deposit, such agreement to be in form and substance acceptable to NEXGEN.

(b) Should the Customer dispute any of the charges on its monthly invoice, it shall notify NEXGEN of such disputed charges in writing no later than sixty (60) days after the date of the invoice. Customers shall timely pay all amounts not in dispute. The notice shall set forth all details (including, without limitation, purchase/service order number, circuit date and circuit number) concerning the disputed charges and reasons for the dispute. NEXGEN and Customer shall attempt in good faith to resolve any objection to the invoiced amount prior to the payment due date or, if the due date has already passed, within ten (10) days of Customer's dispute. If agreement cannot be resolved prior to the payment due date, Customer shall pay the invoiced amount minus the disputed amount on the due date of original invoice. If the dispute is subsequently resolved in favor of NEXGEN, NEXGEN shall re-invoice the disputed amount owed then, including interest at the rate specified in Section 1 from the original due date, and Customer shall pay all amounts agreed or found to be owing to NEXGEN within thirty (30) days of the date of the reissued invoice. Payment shall not prejudice Customer's right to dispute charges, so long as they are disputed in the manner and within the time specified in this section. Any credits resulting from said dispute will be reflected in a subsequent billing cycle. The Parties will cooperate in good faith to attempt to resolve any such disputes within sixty (60) days after the dispute is submitted to NEXGEN.

2. Taxes; Surcharges and Fees. Customer shall be responsible for any applicable federal, state or local use, excise, sales or other taxes, surcharges, fees, assessments or similar amounts in connection with any service furnished to Customer. Customer shall pay all such amounts directly to the taxing authority unless the taxing authority requires that NEXGEN collect and remit payment, in which event Customer shall pay said amounts to NEXGEN and NEXGEN shall remit such amounts to the authority. Customer and NEXGEN shall cooperate in taking all reasonable actions necessary to minimize, or to qualify for exemptions from, any such taxes, duties or liabilities, including the furnishing of certifications that purchases by Customer are for purposes of resale. Customer shall

provide all information to NEXGEN of any exemption of sales, use or other tax claimed by Customer and shall immediately notify NEXGEN of any change in Customer's tax status. Customer shall be solely responsible for obtaining all necessary permits or consents from state or local governments, if any, for use by Customer of ordered services and shall pay all franchise or user fees, if any, imposed or required by the local, state, or federal government upon or as a result of Customer's use of the ordered services.

3. Early Service Termination. "Acceptance" of an ordered service by Customer shall be deemed to have occurred upon the earlier of the Customer's written acknowledgement receiving the ordered service and five (5) days following a firm order commitment date. Customer may at its sole option cancel the Service Order prior to Acceptance of the ordered service under that Service Order, but Customer shall be obligated to pay to NEXGEN, within thirty (30) days of the invoice date, any set up costs and expenses incurred by NEXGEN to prepare and deliver such service. After Acceptance, Customer may at its sole option cancel a Service Order prior to the end of the term of the ordered service for any reason, upon thirty (30) days written notice to NEXGEN setting out the effective date of cancellation. In the event Customer shall cancel any Service Order prior to the expiration of the term set forth in the Service Order, Customer shall remit to NEXGEN on demand an early termination fee equal to: (1) the full amount of all past due charges and interest thereon, if any, and (2) the sum of: (a) one hundred percent (100%) of the monthly recurring charge ("MRC") that would have been incurred for remaining months of the ordered term; plus (b) any disconnection, early cancellation or termination charges incurred and paid to third parties by NEXGEN on behalf of Customer; plus (c) any additional amount specifically set forth in a Service Order.

4. Outage Credit. Customers shall be entitled to a credit for periods of "Service Outage" (as defined below) for "On-Net Services" (as defined below) greater than two (2) hours. NEXGEN agrees to undertake immediate action to correct any Service Outage after receiving notice from Customer that a Service Outage exists. The credit owed to Customer for a Service Outage in excess of two (2) hours shall be computed at 1/1440 of the MRCs applicable to that portion of the service which is subject to the Service Outage for each one-half (1/2) hour or major fraction thereof that a Service Outage continues beyond two (2) hours. A Service Outage begins when NEXGEN is notified or becomes aware of the Service Outage, whichever first occurs. A Service Outage ends when the affected service in NEXGEN's network has passed all required testing and is functioning in compliance with NEXGEN's technical specifications, as may be amended from time to time. For notice purposes, customers must notify NEXGEN's Network Operations Center by calling 1-800-310-9077. In no event shall the credit for any On-Net Service during a calendar month exceed the monthly MRC for such service specified in the Service Order. Customers shall not be entitled to receive any credit for a Service Outage on an "Off-Net Service" (as defined below). A "Service Outage" is a complete disruption of a service or a degradation of the service below NEXGEN's technical specifications, as amended from time to time, applicable to that service

5. Limitation of Liability. For purposes of this section, "NEXGEN" shall be defined as NEXGEN, its controlling entities, affiliates and subsidiaries, and its and their employees, directors, officers, agents, representatives, subcontractors, interconnection service providers and suppliers. NEXGEN MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESSED OR IMPLIED. NEXGEN'S ENTIRE LIABILITY, AND CUSTOMER'S EXCLUSIVE REMEDIES AGAINST NEXGEN, FOR ANY DAMAGES CAUSED BY ANY SERVICE OUTAGE, DEFECT OR FAILURE SHALL BE THE OUTAGE CREDIT SET FORTH ABOVE. NEXGEN'S ENTIRE LIABILITY FOR OTHER CLAIMS ARISING IN CONNECTION WITH ANY SERVICE OR THIS AGREEMENT, IF NOT



OTHERWISE LIMITED BY ANOTHER PROVISION OF THIS AGREEMENT, SHALL BE LIMITED TO PROVEN DIRECT DAMAGES NOT TO EXCEED PER CLAIM (OR IN THE AGGREGATE DURING ANY TWELVE-MONTH PERIOD) THE TOTAL NET PAYMENTS MADE BY CUSTOMER FOR THE APPLICABLE SERVICE DURING THE 12 MONTHS PRECEDING THE MONTH IN WHICH THE DAMAGE OCCURRED. IN NO EVENT SHALL NEXGEN OR CUSTOMER BE LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE, RELIANCE OR SPECIAL DAMAGES, INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS, ADVANTAGE, SAVINGS OR REVENUES OF ANY KIND OR INCREASED COST OF OPERATIONS, WHETHER OR NOT NEXGEN OR CUSTOMER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NEXGEN ALSO SHALL NOT BE LIABLE FOR ANY DAMAGES ARISING OUT OF OR RELATING TO: INTEROPERABILITY, INTERACTION OR INTERCONNECTION PROBLEMS WITH APPLICATIONS, EQUIPMENT, SERVICES OR NETWORKS PROVIDED BY CUSTOMER OR THIRD PARTIES; OR UNAUTHORIZED ACCESS TO OR THEFT, ALTERATION, LOSS OR DESTRUCTION OF CUSTOMER'S, ANY END USERS' OR THIRD PARTIES' APPLICATIONS, CONTENT, DATA, PROGRAMS, INFORMATION, EQUIPMENT, NETWORK OR SYSTEMS. THE LIMITATIONS OF LIABILITY SET FORTH IN THIS SECTION SHALL APPLY: (i) REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT, STRICT LIABILITY OR OTHERWISE; AND (ii) WHETHER OR NOT DAMAGES WERE FORESEEABLE. THESE LIMITATIONS OF LIABILITY SHALL SURVIVE FAILURE OF ANY EXCLUSIVE REMEDIES PROVIDED IN THIS AGREEMENT. NEXGEN HEREBY ADVISES CUSTOMERS THAT FIBER STRANDS ON NEXGEN'S NETWORK MAY BE IN CLOSE PROXIMITY TO ELECTRICAL CABLES THAT ARE SUBJECT TO FAULT, BURNOUT, OR OTHER MALFUNCTION WHICH CAN RESULT IN DAMAGE, DESTRUCTION, OR DISRUPTION TO SUCH FIBER STRANDS. CUSTOMER ACKNOWLEDGES AND AGREES THAT NEXGEN NETWORKS CORP., ASSUMES NO LIABILITY FOR ANY SUCH DAMAGE, DESTRUCTION, OR DISRUPTION.

6. Indemnification. Customers shall indemnify, defend and hold harmless NEXGEN and its affiliates, employees, directors, officers, representatives, subcontractors, interconnection service providers, suppliers and agents ("Indemnified Parties") from and against all demands, claims, actions or causes of action, assessments, losses, damages, liabilities, costs and expenses, including, without limitation, interest, penalties and reasonable attorneys' fees and disbursements (collectively, "Claims"), to the extent any such Claim is asserted by a third party against any Indemnified Party, directly or indirectly, by reason of or resulting from any Customer failure to perform an obligation under this Agreement or any action or inaction of Customer or its employees or agents that is illegal or constitutes negligence or intentional misconduct, or as a result of: (i) claims for libel, slander, infringement of copyright or unauthorized use of trademark, logo, trade name or service mark arising out of use of any service; (ii) claims for patent infringement arising from combining or connection of facilities to use NEXGEN's network; (iii) claims for damage to property and/or personal injuries (including death) arising out of the negligence or willful act or omission of Customer; and (iv) claims that the content or the actions of Customer violate any law or regulation.

7. Force Majeure. Neither party shall be liable, nor shall any credit or other remedy be extended, for any failure to fulfill its obligations under this Agreement due to causes beyond such party's reasonable control, including, but not limited to: acts of God, flood, extreme weather, fire or other natural calamity; any law, order, regulation, direction, action, or request of any governmental entity or any civil or military authority; utility curtailments, cable cuts, power failures, unavailability of rights-of-way or materials; national emergencies, insurrections, acts of terrorism, riots, or wars; or strikes, lock-outs, work stoppages, or other labor difficulties (collectively, "Force Majeure Events"). Each party agrees to notify the other party, as soon as possible, if such a Force Majeure Event has occurred. A Force Majeure Event shall never excuse the failure to make a payment due hereunder, except to the extent that the Force Majeure Event physically interferes with the delivery of the payment.

8. Term. The Agreement shall commence on the Effective Date and, unless earlier terminated in accordance with the terms hereof, shall continue until the fifth (5th) anniversary of the Effective Date (the "Term"). In the event that the Term expires while an ordered service is still being provided under any Service Order, the Term shall automatically be

deemed extended for the duration of the provision of such Service. In the event there is no renewal term stated in the Service Order, the term of the ordered service shall automatically be deemed renewed for successive renewal periods of one (1) year unless either Party provides sixty (60) days' advance written notification of termination to the other Party.

9. Confidentiality. No Party, without the other Party's specific prior written consent, shall disclose to any third party, including but not limited to end-users, any information supplied to it by the other which has been designated as CONFIDENTIAL or PROPRIETARY or PRIVATE ("Proprietary Information"), and which information: is not otherwise generally available to the public; has not been independently developed by the receiving party; or has not previously been known by or disclosed to the receiving Party by a third party not bound by confidentiality restrictions. No party shall permit any of its employees, affiliates, or representatives to disclose Proprietary Information to any third person and it shall disclose Proprietary Information only to those of its employees, affiliates, and representatives who have a need for it in connection with the use or provision of services required to fulfill this Agreement. Prior to disclosing Proprietary Information to its employees, affiliates, and/or representatives, the receiving Party shall notify such employees, affiliates, and representatives of their obligation to comply with this Agreement. If a receiving Party is required by any governmental authority or by applicable law to disclose any Proprietary Information, then such receiving Party shall provide the disclosing Party with written notice of such requirement as soon as possible and prior to such disclosure. Upon receipt of written notice of the requirement to disclose Proprietary Information, the disclosing Party, at its expense, may then either seek appropriate protective relief in advance of such requirement to prevent all or part of such disclosure or waive the receiving Party's compliance with the requirements of this section with respect to all or part of such Proprietary Information. The Parties hereby designate the terms, conditions, Service Orders, appendices, exhibits and schedules of this Agreement to be confidential. Unless required by applicable law, no Party without the written consent of the other Parties, shall provide a copy of this Agreement in whole or in part to any third person or entity not employed or retained by NEXGEN or Customer except as may be required by law.

10. Notices. All communications under this agreement shall be in writing and either mailed by certified or registered mail, postage prepaid and return receipt requested, sent by express courier or hand delivered, or sent by facsimile with a hard copy sent by express courier the following business day. Notices to Customer shall be sent to the address set forth in the introductory paragraph of these Master Terms and Conditions, Attn: Legal Department, or to such other address or facsimile number Customer notifies NEXGEN of in writing. Notices to NEXGEN shall be sent to 64 Beaver Street, Suite 104, New York, NY 10004, Attn: Legal Department, with a facsimile number of 212-208-2637, or to such other address or facsimile number NEXGEN notifies Customer of in writing.

11. Miscellaneous Provisions. (a) This Agreement does not expressly or implicitly provide any third party (including, without limitation, any customer of Customer or end-user) with any remedy, claim, liability, reimbursement, cause of action or other right or privilege.

(b) The provision of any service by NEXGEN does not constitute a joint undertaking with Customer for the furnishing of any service or capacity to any other party. Whenever a service provided by NEXGEN is connected to facilities provided by another person or entity, the regulations, terms and charges of such other person or entity shall apply for the facilities provided by such other person or entity. NEXGEN does not undertake to make NEXGEN's services available to any person or entity other than Customer.

(c) NEXGEN and Customer are independent parties and shall not be deemed or construed, by virtue of a Service Order or any agreement, to be the employee, representative, partner, or joint venture of the other.

(d) All services are subject and subordinate to the terms of the Underlying Rights (defined below), including, but not limited to, covenants, conditions, restrictions, easements, reversionary interests, bonds, mortgages and indentures, and other matters, whether or not of record, and to the rights of tenants and licensees in possession. All services are further subject and subordinate to the prior right of the grantor of the Underlying Rights to use the right of way for other



business activities, including railroad operations, telecommunications uses, pipeline operations, electrical services or any other purposes, and to the prior right of NEXGEN to use its rights granted under the Underlying Rights. All services provided to Customers are expressly made subject and subordinate to each and every limitation, restriction or reservation affecting the Underlying Rights. Nothing herein shall be construed as to be a representation, warranty or covenant of NEXGEN's right, title or interest with respect to the right of way or the Underlying Rights. Upon the expiration or other termination of an Underlying Right that is necessary in order to grant, continue or maintain any service, NEXGEN shall use commercially reasonable efforts to renew such Underlying Right or to obtain an alternate right of way. If NEXGEN is required to relocate any part of its network during the term of this Agreement, including any of the facilities used or required in providing services to Customer, NEXGEN shall determine the extent of, the timing of, and methods to be used for such relocation. Relocation shall not affect the term of this Agreement or the term of any services ordered. "Underlying Rights" means the right of way, access rights and other agreements obtained by NEXGEN for the construction, operation and maintenance of its network and/or facilities.

(e) If any part of the Service Order, these Terms and Conditions, or of any other agreement, document or writing given pursuant to or in connection herewith shall be invalid or unenforceable under applicable law, said part shall be ineffective to the extent of such invalidity only, without in any way affecting the remaining parts of this Agreement or other agreement, document or writing. In the event of any conflict or inconsistency between these Terms and Conditions and any Service Order, these Terms and Conditions shall govern and control.

(f) The Service Order, these Terms and Conditions, the ordered services, the rights and obligations of the parties hereto, and any claims or disputes relating thereto, shall be governed by and construed in accordance with the laws of New York, without reference to choice of law principles that would fix jurisdiction in a different State.

(g) Customer acknowledges that NEXGEN may have signed a building access agreement in order to bring services to the property in which Customer is located. Customer agrees that the owner of such property is not a telecommunications service provider, such owner will not be responsible in any way for the delivery of services, NEXGEN is not related to such owner, and any cessation or interruption of services shall not constitute a default or constructive eviction by such owner under any agreement between it and Customer.

(h) Customers may not assign this Agreement without the prior written consent of NEXGEN, which consent shall not be unreasonably withheld. This Agreement shall be binding upon and inure to the benefit of, and may be performed by, Customer's successor and assign, except that no assignment, pledge, or other transfer by Customer shall operate to release Customer from any of its obligations under this Agreement unless: (i) consent to such release is given in writing by the NEXGEN; (ii) such assignment, pledge or transfer is made to an affiliate of Customer and such affiliate is at least as creditworthy as Customer (as reasonably determined by NEXGEN), or (iii) such assignment, pledge or transfer is incident to a merger, reorganization, consolidation or other transaction in which substantially all of Customer's assets are transferred to another person or entity who assumes all of Customer's obligations under this Agreement and such person or entity is at least as creditworthy as Customer (as reasonably determined by NEXGEN). This Agreement (including, without limitation, any individual Service Order) shall be fully assignable by NEXGEN in whole or part, including, without limitation, to the provider of Off-Net Services. Notwithstanding anything herein to the contrary, (i) a security interest in this Agreement (including, without limitation, any individual Service Order) may be granted by NEXGEN to any lender to secure borrowings by NEXGEN or any of its Affiliates and (ii) any subsidiary of NEXGEN may assign any amounts due from Customer to NEXGEN for billing purposes.

(i) Logo and Name Usage. NEXGEN hereby grants Customer the right to use NEXGEN's logo, subject to logo usage guidelines to be provided by NEXGEN to Customer. Customer hereby grants NEXGEN the right to use Customer's logo, subject to logo usage guidelines to be provided by Customer to NEXGEN. Each party shall be permitted to identify the other party as its customer or supplier, as the case may be, to use the other party's name in connection with proposals to prospective customers, and

to refer to the other party in print or electronic form for marketing or reference purposes, which would not require prior written approval.

(j) The Service Order and these Terms and Conditions constitute the entire Agreement between NEXGEN and the Customer with respect to the subject matter hereof, and it supersedes all prior oral or written agreements, commitments or understandings with respect to the matters provided for herein. Except as provided herein, the terms of this Agreement may only be amended or modified by an instrument in writing executed by the parties hereto.

(k) The Customer is the sole contracting and billing entity for this transaction. No third-party reseller, distributor, or any other billing entity is involved unless expressly approved in writing by NexGen Networks. Customer further agrees that all payment obligations are direct, unconditional, and not subject to or contingent upon any third-party billing arrangements, internal processes, or downstream payment dependencies.

IN WITNESS WHEREOF, NexGen and Customer have caused this Agreement to be executed by their duly authorized representatives as of the date first written above.



APPENDIX 1 LIST OF AVAILABLE SERVICES

Dedicated Transport

Each Transport Service is provisioned to Customer and is billed on a fixed monthly basis. The entire usable bandwidth for each service is available to Customer for its exclusive use, twenty-four (24) hours a day, seven (7) days a week. There are three basic configurations for Dedicated Transport Service: Point-to-Point Service, Point-to-Multipoint (Hubbed) Service and Ring Configured Service.

Point-to-Point Transport

Dedicated Transport Services are available between NEXGEN-designated locations on a point-to-point basis. Service may be ordered between Customer POPs, the Customer POP and the NEXGEN POP, and the Customer POP and an End User building. Point-to-Point Service allows two (2) Customer-designated locations to be connected by one (1) dedicated transport service. The Service terminated at each location must be the same speed/capacity. NEXGEN offers Point-to-Point Transport services at the following speeds:

- DS-1 (1.544 Mbps)
- DS-3 (44.736 Mbps)
- STS-1 (51.84 Mbps)
- OC-3/OC-3c (155.52Mbps)
- OC-12/OC-12c (622.080 Mbps)
- OC-48 (2,488.320 Mbps)
- 1 MEG Through 1 Gigabit Per Second (1-1,000 Mbps)
- 1 Gigabit Per Second Through 10 Gigabit Per Second (1,000 Mbps-10,000 Mbps)
- 10 Gig Point to Point or Wavelength (10,000 Mbps)
- 40 Gig Point to Point or Wavelength (40,000 Mbps)
- 100 Gig Wavelength (100,000 Mbps)
- 400 Gig Wavelength (400,000 Mbps)

Point-to-Multipoint Transport

Point-to-Multipoint Service allows Customers to aggregate multiple lower capacity transport services terminating at multiple locations onto one higher capacity service interface terminating at a single NEXGEN location. Sometimes referred to as "Hub and Spoke", Point-to-Multipoint service is provisioned from a single customer interface point (A) to multiple termination points across the NEXGEN network (B-Z). The aggregate bandwidth sum of sites B-Z must be less than or equal to the bandwidth available at Customer interface point A. NEXGEN offers Point-to-Multipoint Transports services at the following speeds:

Hub

- OC-3 (155.52Mbps)
- OC-12 (622.080 Mbps)
- OC-48 (2,488.320 Mbps)

Spoke

- DS-3 (44.736 Mbps)
- STS-1 (51.84 Mbps)
- OC-3/OC-3c (155.52Mbps)
- OC-12/OC-12c (622.080 Mbps)

ON-NET/TYPICAL SERVICES

OC-48 Service. OC-48 Service is a dedicated, high capacity, full duplex channel with a line speed of 2,488.320 Mbps and is configured with 48 separate STS-1 signaling paths.

OC-12C Service. OC-12C Service operates at 622.080 Mbps with 1 STS-12C signaling path.

OC-12 Service. OC-12 Service operates at 622.080 Mbps with 12 separate STS-1 signaling paths of 51.84 Mbps each, having the equivalent capacity of 336 DS1 Services or 12 DS3 Services.

OC-3C Service. OC-3C Service operates at 155.520 Mbps and is configured with 1 STS-3C signaling path.

OC-3 Service. OC-3 Service is a dedicated, high capacity, full duplex channel with a line speed of 155.520 Mbps serial data having the equivalent capacity of 84 DS1 Services or 3 DS3 Services. OC-3 Service operates at 155.520 Mbps and is configured with 3 separate STS-1 signaling paths of 51.84 Mbps each

DS-3 Service. DS-3 Service is a dedicated, high capacity, full duplex channel with a line speed of 44.736 Mbps isochronous serial data having a line code of bipolar with three zero substitution (B3ZS). DS-3 Service has the



equivalent capacity of 28 DS-1 Services at 1.544 Mbps or 672 Voice Grade ("VG") services or 672 DS-0 Services at 56/64 Kbps.

DS-1 Service. DS-1 Service is a full duplex channel with a line speed of 1.544 Mbps. DS-1 uses a line signal format of either Alternate Mark Inversion ("AMI") or Binary 8 Zero Substitution ("B8ZS") and either Superframe (D4) or Extended Superframe formats. DS-1 Service has the equivalent capacity of 24 Voice Grade ("VG") services or 24 DS-0 services. AMI can support 24 each 56 Kbps channels and B8ZS can support 24 each 64 Kbps channels.

Point-to-Point Ethernet. Point-to-Point Ethernet Service is configured between two locations (defined as A and Z) and facilitates communication between two customer locations. Point-to-Point Ethernet Service is available at the following interface rates:

- 10Mbps
- 50Mbps
- 100Mbps
- 622Mbps
- 1Gbps
- 10 Gbps
- 40 Gbps
- 100 Gbps
- 400 Gbps

NEXGEN's Point-to-Point Ethernet Service conforms to IEEE 802.3 standards.

Switched Ethernet Service (configurations include point-to-multipoint and multipoint-to-multipoint)

NEXGEN's Switched Ethernet offering is configured in a one-to-many topology and facilitates communications between multiple customer locations.

NEXGEN's IEEE 802.3 standards-based Switched Ethernet service for Layer 2 transport in the Metro area at the following interface rates:

- 10 Mbps (IEEE 802.3) delivered via 10/100 interface
- 11 Mbps, 12Mbps, 13Mbps, 14Mbps, 15Mbps, 16Mbps, 17Mbps, 18Mbps, 19Mbps, 20 Mbps, 30 Mbps, 40 Mbps, 45 Mbps, 50 Mbps, 60 Mbps, 70 Mbps, 80 Mbps, 90 Mbps, and 100 Mbps
 - o All are delivered via a 100 Mbps interface that is scaled back according to customer request. This service conforms to IEEE 802.3u standards.
- 155 Mbps, 200 Mbps, 300 Mbps, 400 Mbps 500 Mbps, 622 Mbps, 700 Mbps, 800 Mbps 900 Mbps, and 1 Gbps, 10 Gbps, 40 Gbps, 100 Gbps, 400 Gbps
 - o All service speeds from 100 Mbps to 400 Gbps are delivered via an IEEE 802.3z compliant interface at speeds requested by the customer.

Dedicated Internet Services

Internet Access. Internet Access is a Layer 3 IP transit service providing access to the global Internet. Internet Access is available with a single port on Customer's premise and a single port at NEXGEN's Internet gateway located at 111 8th Avenue. Redundant service may be available upon special request. Internet Access is available on the following platforms:

- Dedicated DS-1 (1.544 Mbps)
- Dedicated DS-3 (44.736 Mbps)
- Other Multi-Megabit Access Service at the following interface rates: 3.0 Mbps (Bonded DS-1); 4.5 Mbps (Bonded DS-1); 6.0 Mbps (Bonded DS-1); 10, 20, 30 and 40 Mbps (Fractional DS-3); and 60, 70, 80 and 90 Mbps (Bonded DS-3).
- PowerLan Ethernet Service Platform: 1Mbps to 400 Gbps

IP Addresses. Customers may order up to eight (8) IP addresses. If Customer orders more than eight (8) IP addresses, Customer shall complete an IP address justification form. Customers may choose to provide their own IP addresses.

Domain Name Service ("DNS"). Primary and Secondary Domain Name System service. The Domain Name System is a hierarchical, distributed method of organizing the namespace of the Internet. The Domain Name System administratively groups hosts into a hierarchy of authority that allows addressing and other information to be widely distributed and maintained. By providing Customer DNS, NEXGEN eliminates dependence on a centrally maintained file that maps host names to addresses.



Global Cloud Connect Services for Private Line or SD WAN.

Global Cloud Connect: Global Cloud Connect product can be delivered in 2 main ways. It can be delivered via NexGen DIA (Dedicated Internet Access) Service via our Global SD WAN product or it can be delivered via dedicated private line. Both services are fully managed by NexGen Global 24/7/365 Day a year Global Network Operations Center. These services are delivered via Layer 2 (Private Line) & Layer 3 (SD WAN), although troubleshooting any outages may require both Layer 2 (Ethernet MAC) & Layer 3 (IP Address) level of troubleshooting to determine the root cause analysis.

Cloud computing is the on-demand availability of computer system resources, especially data storage and computing power, without direct active management by the user. Large clouds often have functions distributed over multiple locations, each location being a data center. NexGen Global Cloud Services is available on the following platforms in most regions around the world:

- Dedicated SDH or SONET (on Individual Case Basis as most Cloud Providers only accept Ethernet)
- SD WAN Managed Product in which NexGen engineers setup layer 3 routing via either loops of DIA (Dedicated Internet Access) or Private Line (such as MPLS or wavelength), as well as failover schemes in line with customer approval on architecture.
- Private Line Ethernet which is a dedicated Point to Point Service (normally with KMZ or route path information as needed or requested by the customer) for direct connectivity to any of the cloud providers in any global region. Today, NexGen deploys most regional coverage around the globe.
- Interface Types Supported: 1 Gig, 10 Gig, 100 Gig, 400 Gig Single Mode Fiber (SMF). All others ICB.



Appendix 2 NETWORK TRANSPORT TECHNICAL SPECIFICATIONS

The following provides non-binding transmission performance objectives for Services covering the bi-directional path as specified in the Service Order and measured from the Point of Termination on a basis of 24 hours per day, 7 days per week. It does not apply in cases of fiber cuts, Customer's purchase of non-diverse Services, or Customer's failure to use SONET equipment with automatic protected switching capabilities.

Circuit Availability Objective Node to Node

<u>Service</u>	<u>Availability</u>
400Gbps Wavelength Protected:	99.998%
400Gbps Wavelength Unprotected:	99.90%
100Gbps Wavelength Protected:	99.998%
100Gbps Wavelength Unprotected:	99.90%
40Gbps Wavelength Protected:	99.998%
40Gbps Wavelength Unprotected:	99.90%
10Gbps Wavelength Protected:	99.998%
10Gbps Wavelength Unprotected:	99.90%
2.5Gbps Wavelength Protected:	99.998%
2.5Gbps Wavelength Unprotected:	99.90%
OC-192:	99.998%
OC-48:	99.998%
OC-12 Protected at card level:	99.998%
OC-12 Unprotected at card level:	99.90%
OC-3c Protected at card level:	99.998%
OC-3c Unprotected at card level:	99.90%
OC-3 Protected at card level:	99.998%
OC-3 Unprotected at card level:	99.90%
DS-3 Protected N:1:	99.995%
DS-3 Protected 1:1 at card level:	99.998%
DS-1:	99.995%
<u>Background Bit Error Ratio ("BBER"):</u>	For DS-1 and DS-3: 1×10^{-11}
<u>Frame format:</u>	Transparent to framing
<u>Maximum Consecutive Zeros (DS-1):</u> 15	
<u>Error Bursts ("BES"):</u>	No more than 1 event second per 24 hours
<u>Error Free Seconds ("EFS"):</u>	DS-1 - 99.995%; no more than 3 errored seconds over a 24 hour period across the NEXGEN SONET network
<u>Bi Polar Violations:</u>	None
<u>Clocking:</u>	Derived from T1 source, either Customer or NEXGEN. Stratum 2 level clocking traceable to a Stratum 1 level source.
<u>Test periods:</u>	
SONET test period:	24 hours
Test periods for DS-3:	24 hours
Test periods for DS-1:	4 hours
Ethernet Test Periods	24 hours

Industry Specifications

All Circuits must meet applicable specifications contained in Bellcore FR-NWT-000440

Specific NEXGEN Interface Specifications are as follows:

- OC-3 -- -8dBm to -15 dBm (NRZ 155.52 Mbps - 1310 nm, Compliant GR-GSY-00253)
- OC-12 -- -8dBm to -15 dBm (NRZ 622.08 Mbps - 1310 nm, Compliant GR-GSY-00253)
- OC-48 -- -5dBm to 0 dBm (NRZ 2.49 Gbps - 1310 nm, Compliant GR-GSY-00253)
- OC-192 -- Bitrate 9.95328 Gbit/s , Tx power 5.5 dBm Maximum Typical, Tx power 5 dBm, Minimum Tx power 4.5 dBm, Minimum Rx sensitivity, -11 dBm, Maximum supported reach (NDSF) 17 km, 1310 nm
- DS-1
 - Bit Rate: 1.544 Mbps +/- 32 ppm
 - Frame Format: Off, SF (D4), ESF
 - Line Code: AMI, B8ZS
 - Input Impedance: 100 ohms
 - Cable Loss: Max 655 ft. ABAM #22 AWG
 - AIS: TR-TSY-000191-compliant



DS-3

- Bit Rate: 44.736 Mbps +/- 20 ppm
- Frame Format: DS-3 ANSI T1.107-1988
- Line Code: B3ZS
- Termination: Unbalanced coaxial cable
- Input Impedance: 75 ohms +/-5%
- Cable Loss: Max 450 ft. 734A, RG-59, 728A/Max 79 ft. RG-179
- AIS: TR-TSY-000191-compliant

Ethernet

<u>Service</u>	<u>Availability</u>
Point-to-Point Ethernet Service	99.99%
PowerLan Switched Ethernet Service	99.95%

NEXGEN's 10/100, 1-400 Gbps Ethernet services are delivered to an End-User's building via single mode fiber optic cabling and connected via SC fiber connectors to a NEXGEN-owned Ethernet device resident in the End-User's building.

NEXGEN's 10 and 100 Mbps Ethernet service provides Customer and End-Users with hand offs (RJ-45, 8 pin modular connectors) that support Ethernet frame transmission over standard 4-pair, 100ohm, Category 5 (CAT-5) unshielded twisted pair (UTP) balanced copper wiring for distances up to 100 meters, as defined by the ANSI/TIA/EIA-568-A (1995) cabling standard.

NEXGEN's 1-400 Gbps Ethernet services are delivered to customer premises via fiber optic cabling and support Ethernet transport service at the maximum speed of 400 Gbps. The NEXGEN switches operate in full duplex mode. The Customer may request for the handoff to be 1000 Base LX or 1000 Base SX with SC fiber connectors as the physical interface.

NEXGEN's Switched Ethernet Service utilizes IEEE 802.1p/Q Layer 2 VLANs (Virtual LANs) for Customer traffic segmentation. The 802.1Q standard makes use of the concepts and mechanisms of LAN Bridging that were introduced by ISO/IEC 15802-3, and defines additional mechanisms that allow the implementation of Virtual Bridged LANs.

VLANs facilitate administration of logical groups of stations in disparate locations that can communicate as if they were on the same LAN. VLANS facilitate easier administration of moves, adds, and changes in members of these groups.

A VLAN is defined by the IEEE as "a subset of the active topology of a Bridged Local Area Network. Associated with each VLAN is a VLAN Identifier (VID)."

For Traffic Expediting, NEXGEN utilizes 802.1p priority tagging to ensure prioritization of certain traffic classes across the NEXGEN network. NEXGEN does not assume responsibility for traffic prioritization once traffic exits the NEXGEN network.

Depending on the configuration desired or required, NEXGEN Ethernet Services can be provisioned in both a restorable and non-restorable mode.