



## Schedule B2 – Service Description LANx

### 1. Service Name

LAN Extension (LANx) - T1/Bonded T1, EoD (Ethernet over Docsis), EoC (Ethernet over Copper), Fibre (E10/100/1000)

### 2. Service Term

All services under this schedule shall individually each be on a 5 year term from the date of installation. Upon each expiration, the term shall renew automatically for an additional term equal to the Service Term listed herein (each a “Renewal Service Term”) unless the Service is terminated at the end of the Service Term or at the end of any Renewal Service Term by a Party notifying the other in writing of such intention no later than ninety (90) days prior to the end of the Initial Service Term or Renewal Service Term, as the case may be. At the end of each Renewal Service Term, an additional Renewal Service Term will commence unless the Service is terminated in accordance with the foregoing. “Wireless Connection” and “Connection” is used interchangeably throughout this schedule.

### 3. Service Description

Comwave’s Broadband LANx service (Services) provides a business with an always-on, high-speed data connection from the End-User’s premises to one of Comwave’s Data Centres. At the Data Centre the LANx circuit is connected either directly to the Internet, or optionally to a private network. Available access types are:

T1 – is a widely-deployed, widely-available high-speed data transport technology that offers speeds up to 1.5 Mbps, both to and from the End-User’s premises. This service is typically provided via a 4-wire circuit from the End-User’s premises to equipment located in a nearby CO, although it may be provided in the form of a 1.5Mbps PVC via fibre optic circuit, if available. Bonded T1 combines multiple T1 circuits to achieve higher upload and download speeds.

EoD (Ethernet over Docsis) – offers multiple speeds via coaxial cable infrastructure.

EoC (Ethernet over Copper) - offers speeds between 2 – 10Mbps symmetrical via Ethernet-in-the-First-Mile (EFM) standard (IEEE 802.3ah). 2BASE-TL is a long reach, Ethernet-over-copper technology that supports bonding of 1-8 voice grade copper loops.

Fibre (E10/100/1000) – offers speeds between 10 - 200 Mbps, both to and from the End-User’s premises via a fibre optic circuit.

All circuits are terminated at the End-User’s premises via CPE specified by Comwave. Onsite Installation is included in this service.

Specifications and standard pricing for each broadband service as provided by the various Last Mile Carriers are described below, in Section 3: “Service Specifications”. Comwave reserves the right to change these specifications as Last Mile Carriers change their services. If such a change reduces the speed obtained for an installed circuit, Subscriber shall have the option to cancel such circuit without incurring any Early Termination or other fee.

### 4. Service Specifications

The following chart shows the Bandwidth and Class of service options for a given access type. Options vary by last mile carrier and not all options may be available at all locations. The Bandwidth and Class of Service for a specific circuit is defined in the Service Order for that circuit.

Access Type	Bandwidth*	Class of Service
T1	1.5/1.5 Mbps	Burstable or Dedicated
Bonded T1	3/3 – 6/6 Mbps	Dedicated
EoD – BC/AB	1.5/1.5, 3/3, 5/5 Mbps	Best Effort
EoD – ON/QC	2/2, 10/2, 50/2, 10/10 Mbps	Best Effort
EoC	2/2, 10/10Mbps	Best Effort
E10 Fibre	10/10Mbps	Burstable/Standard or Dedicated/Priority
E100 Fibre	Multiple speeds available from 30 - 100 Mbps symmetrical	
E1000 Fibre	200 Mbps	

All services include:

CPE	Included
Static IP Addresses**	Up to 8 included (5 usable)
Onsite Installation	Included



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Install Service Interval	See Section 6: Installation
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\*For detail on expected data transfer speeds, please refer to Section 8: “Service Level Commitments” under the heading “Committed Speed”.

\*\*IP addresses will be allotted as required by the client. For more than 8 IP addresses, Comwave requires that the customer complete an IP Address Request Form to justify IP usage as per ARIN guidelines. Customers must have 25% immediate utilization and 50% utilization within one year. Comwave does not guarantee that any specific request will be accommodated.

### **Optional Services**

#### Monitoring

Comwave can monitor Customer’s connectivity circuits 24x7 using Comwave Network Operations Center.

- A failure will only be identified after approximately five minutes after the circuit actually suffers a hard failure. A trouble ticket will then be automatically generated by our monitoring system.
- If Customer has chosen to receive circuit failure alerts, the system will automatically email an alert for each trouble ticket created to the email address designated by Customer. Email alerts are not sent immediately, but are delayed because most outages self-resolve within 15 minutes; during daytime alerts are sent after 15 minutes, at night-time, after 30 minutes. If the site recovers before the email is sent, no alert is sent. However, the Trouble Ticket will be available for review in the portal at any time thereafter.
- Comwave’s technical support staff will initiate the troubleshooting process, and follow through as appropriate with any carriers until the problem is fully resolved. Tickets may also be opened by authorized Customer staff calling or emailing Comwave’s technical support department.

#### Back-up

Comwave can provision an additional connectivity circuit or wireless 4G/LTE to act as a redundant circuit in the even the primary circuit fails. The flip from primary to failover is near real-time offering an unmatched network uptime. Additional hardware is required.

## **5. Standard Prices & Fees**

Actual Customer pricing is set forth in Schedule C – Pricing and Initial Order, and may deviate from the standard rates and service terms set forth below. Taxes are extra.

The Standard Pricing set forth here shall apply to any items not explicitly set forth in Schedule C.

### **Monthly Recurring Charges**

The Monthly Recurring Charges (“MRC”) shown in Schedule C for the Services herein or any Optional Services apply to each circuit installed for Customer. Each circuit ordered under this agreement is independently subject to the Initial Term herein from the date of installation.

### **Activation and Installation Charges**

A one-time Activation Fee may be charged for each circuit at the time of Circuit Acceptance, as defined in Schedule C – Pricing & Initial Order or applicable Service Order. Until a physical, onsite facility check is completed; all pricing should be treated as budgetary and non-binding. Onsite facility checks can uncover factors such as wiring issues, unavailability of service, building problems that the initial availability check will not reveal. Neither Comwave nor the customer will be contractually bound to a service price until a facility onsite check has been completed and any additional construction fees have been discovered and agreed to. In the event that additional fees are identified Comwave will inform the Customer of the charges and the Customer may terminate the service prior to the beginning of provisioning the service, without incurring any termination charges. At the time of installation, any inside fibre costs, conduit, riser cable, etc will apply in addition to the quoted costs.

Additional fees could also be incurred under the following circumstances: if it should be necessary for us to coordinate a hot cut, if work must be performed during overtime or off hours (evenings, weekends or holidays), if subsequent site visits are requested by the customer or are necessary due to the site and/or contact not being ready for the installation, if you have asked to extend past demarc.

### **Customer Premise Equipment “CPE”**

All Connectivity Services herein include a Media Gateway Hardware (CPE) that terminates the electrical or optical signal from the network into an Ethernet port. Rental of this CPE is included in the Monthly Recurring Charge above. Unless Customer has purchased an extended warranty from Comwave, the CPE carries a 90-day manufacturer’s warranty against defect. The replacement cost of the CPE for non-



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warranty situations is \$1000 plus shipping and installation. Customer will typically require to supply its own router to control its own LAN traffic. Comwave can supply that for an additional cost.



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### Service Changes

Order cancellation within 24 hours of order	No Charge
In Building Move	\$750 plus any applicable build or carrier costs

Note: A move between two Customer locations at different addresses is not considered a Change request. Such a move will be considered to be an order request for a new Service addition, which requires coordination with a Service termination request, and payment of applicable installation and early termination charges.

In addition, Customer shall also be liable for and shall pay to Comwave (i) any build or up front capital costs waived by Comwave at the commencement of the Initial Service Term; and (ii) all third party cancellation or termination charges or fees incurred by Comwave as a direct result of the termination by Comwave of any third party services or agreements in connection with the termination of any Services hereunder. Comwave shall use commercially reasonable efforts to avoid or mitigate the imposition of such third party cancellation or termination charges or fees wherever possible.

In certain cases a termination fee may differ from those described above. In such case, the termination fee will be included on the Service Order submitted for that service. In the case of a discrepancy between this section and the Service Order, the Service Order shall be deemed correct.

## 6. Service Responsibilities

### Comwave Shall:

- Provision a new connectivity local loop with a last mile carrier
- Inform the customer of the services ordered and relay the activation date to the Customer
- Technical support and 24x7 NOC monitoring
- Provided Hardware installed at Customer premises is under warranty Comwave will repair and/or replace the hardware that is determined by to be defective and not the subject of Customer misuse. Comwave will use commercially reasonable efforts to send replacement Hardware via next business day delivery. Model and specifications for the Hardware are subject to change without notice. Replacement of the Hardware is at the sole discretion of Comwave. The Hardware that is replaced must be returned to Comwave. If the Hardware is not returned within 20 business days, Comwave may charge for the full cost of the Hardware. Hardware that is not under warranty shall be replaced after Customer approved quotation.

### Customer Shall:

- Provide correct information about new service location. Information to include but is not limited to; customer’s existing phone line provider, building address including suite number as displayed on the phone provider’s invoice.
- Provide a secure dry location for mounting the Hardware with power available.
- Be responsible for all premise internal wiring

## 7. Installation

There are typically two on-site installation visits for the Services. First, a technician from the last mile supplier will install the CPE. Following that visit, a Comwave technician will visit the End-User premises at a time agreed to by the End-User in order to test the connection by confirming a ping test with Comwave’s network operations centre. **No internal wiring is included.** If any additional tasks are required, a custom statement of work and quote is required.

Access Type	Service Interval*
T1 or Bonded T1	60 Calendar Days
EoD/EoC	40 – 60 Calendar Days
Fibre	90 – 120 Calendar Days



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\*The lead times listed above are the standard which should encompass all orders where facilities are available. These lead times do not include the time required for building permits for digging, labour disputes or other facilities requirements that are outside of the norm.

### Comwave Shall:

- Provision the LANx service
- Provide on-site installation, which includes
  - Connect the CPE
  - Test and verify Internet connectivity

### Customer Shall:

In order to provision Onsite Installation, Comwave requires the customer acknowledge and meet the following criteria:

- Comwave will request the name of the customer's onsite contact and this individual must either be present for the installation or be available by telephone
- The technician is not responsible for any inside wiring work that may be required
- The technician is not responsible for any other configurations when on site, such as setting up workstations, POS equipment and routers that are not supplied by Comwave Communications
- Customer's staff must be aware a technician will be onsite, and provide access to the premise
- Supply a conduit with pull string from the property line to their server or equipment room; a plywood backboard; and a #6 ground in proper condition.

These requirements are in place to ensure that a technician need only be dispatched one time per location. Should Customer fail to meet these obligations Comwave reserves the right to charge Customer a Return Visit Fee of \$195, plus any applicable fees for travel outside of a Comwave zone one POP. If Customer requests to reschedule the installation with less than two full business days advance notice, Comwave reserves the right to charge Customer a Schedule Change Fee of \$95.

## 8. Service Level Commitments

### Committed Speed

The maximum data transfer rate attainable between the customer premise and Comwave's Data Centre is ~85% of the circuit bandwidth ordered, due to overhead on lower level protocols like ADSL, ATM, Ethernet, IP, TCP. Comwave does not guarantee throughput from the Internet to a personal computer and vice-versa, as actual throughput is highly dependent on external factors such as Internet congestion and protocol overhead. If a circuit is continuously and chronologically documented through Comwave tests and vendor Trouble Tickets as functioning below the loop speeds as defined above for 60 consecutive days, Customer may disconnect the Service without penalty.

Burstable/Standard Class of Service – No committed bandwidth level. Traffic is only dropped for higher priority upon congestion.

Dedicated/Priority Class of Service – Engineered for high priority traffic. Lower priority traffic is dropped upon congestion.

### Service Availability

Comwave provides a service availability target of 99.9% for the Services each calendar month. If the availability target for a particular month is not met, Customer may request a credit for 10% of the circuit's Monthly Recurring Charge for each 1% of service outage in excess of the availability target. An "outage" is defined as when no traffic is able to be transferred on the line as evidenced by Comwave being unable to ping the CPE from its Network Operations Centre. The start time of an outage is based on the time a trouble ticket is created. Outage due to pre-announced maintenance periods, power failure at the CPE, hardware failure of the CPE, problems with the wiring between the CPE and the telephone line demarcation point, or acts of God or war shall not be considered to be outages as defined.

EoD/EoC – Target Availability is 99.9%. This service is not eligible for service credits.

### Mean Time to Repair "MTTR"

Comwave's target response time for service restoration following phone notification of a circuit outage is 4 hours. If Comwave is unable to meet this target response time, Customer may request a credit for 10% of the circuit's Monthly Recurring Charge. Any time spent by Comwave waiting for the Customer to provide a response, perform a diagnostic action, or be available for an onsite technician visit will be excluded from the MTTR. In no case shall the sum of target response time credits and service availability target credits during a calendar month exceed the total of Customer's Monthly Recurring Charge for an individual LANx circuit.

EoD (BC/AB) – Target MTTR is 4 Hours in Tier 1 cities (Vancouver, Calgary, Edmonton, Winnipeg) and 8 hour MTTR in other areas.

EoD (ON/QC) – Target MTTR is 48 Hours



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### Chronic Outages

Comwave commits that each LANx circuit will continue to function without Chronic Outages after its acceptance. If an individual LANx circuit suffers from Chronic Outages, then Customer may cancel the individual Service without incurring the Early Termination penalty for that Service. Chronic Outages shall be defined as five or more Service Interruptions, each lasting two hours or more, within any period of 30 consecutive calendar days. A Trouble Ticket must be opened for each Service Interruption while the interruption is occurring, and Customer must have someone present to provide reasonable assistance such as power cycling the CPE while the Comwave technicians attempt to resolve the problem. Customer must give notice of intent to cancel within 7 calendar days after the last Service Interruption. Comwave shall then have 30 calendar days to cure the problem. Comwave shall be deemed to be unable to cure the problem if there are more than two Service Interruptions of two hours or more each during the last 10 calendar days of the cure period.

### Modifications

Comwave reserves the right to modify any of the above Service Level Commitments with 30 days written notice. These modifications may apply both to new and existing circuits ordered under this Agreement. If such modifications materially reduce the future levels of committed Service Delivery for existing circuits, then Customer may cancel these circuits. Unless Customer provides notice of intent to cancel existing circuits within 30 days after written notice was issued by Comwave, Customer is deemed to have accepted the modifications for all circuits ordered under this Agreement.

## 9. Service Acceptance

The Services are deemed installed and accepted upon successful testing by Comwave technicians.