

## SERVICE DESCRIPTION FOR EQUANT LAN ACCESS SERVICE

1. **Overview.** Equant LAN Access Service (“LAN Access”) is an end-to-end fully managed Network Service that interconnects Customer’s Local Area Networks (“LANs”) across the Equant Network using Equant’s Frame Relay, X.25, or ATM Service for connectivity and transport, which Network Services Customer may select for each router and which will be described in a separate Service Description(s) attached to this Agreement.

2. **Standard Features.** The standard features of LAN Access include the design of Customer’s LAN Access network; procurement, configuration, installation, testing, and support and maintenance of CPE; and life cycle management.

2.1. **CPE.** The Customer Edge (“CE”) routers provided as CPE will be installed, maintained, and managed by Equant at the Location. CE router models are dictated by the LAN Access requirements. LAN Access includes the design of the CE routers’ LAN/WAN inter-networking environment. Equant may provide upgrades to CE routers upon Customer’s request, and any such upgrades will be subject to an additional charge; Equant will not charge Customer for any upgrades to CE routers that are required by Equant.

2.2. **Integrated Routing.** The routing protocol used inside the LAN Access Virtual Private Network (VPN) is either OSPF or EIGRP. OSPF is the default protocol for IP routing, and EIGRP is the default protocol for IPX. Both can coexist in a multi-protocol environment, but either can be implemented at Customer’s request. Integrated routing provides route redistribution into routing protocols such as OSPF, EIGRP, IGRP, and RIP 1 & 2 on Customer’s LAN.

2.3. **LAN Protocols Supported.** LAN Access supports the following protocols: TCP/IP, IPX, DECnet IV, Banyan Vines, and Transparent Bridging (i.e., Appletalk, DEC LAT, MOP). SNA and X.25 applications or devices are supported via encapsulation protocol methods (i.e., DSLW+ and XoT mechanisms).

2.4. **Multiple Access Speeds.** Equant makes available, and Customer may select from, multiple speeds for each of the access services for LAN Access.

3. **Optional Features.** In addition to the standard features, LAN Access includes the following options, which may be subject to additional Charges:

3.1. **X.25/Frame Relay Gateway.** Equant’s X.25/Frame Relay Gateway enables Customer to use both X.25 and Frame Relay technologies to connect its LAN Locations.

3.2. **DSL Access.** Digital Subscriber Line (DSL) access enables remote Locations to be connected to the LAN Access VPN using xDSL technology, which has country-specific characteristics. If Customer purchases DSL Access, Equant will provide, install and manage the DSL router. In some countries, DSL Access is subject to traffic volume limitations. Customer acknowledges and agrees that if it exceeds a traffic volume limitation, Equant could become liable to the DSL Access provider for additional charges. Therefore, if Customer exceeds a traffic volume limitation in any 3 months during a rolling 12-month period, then Equant shall have the right to:

(i) request Customer to upgrade the traffic volume profile to a new limit that Customer is less likely to exceed and to charge Customer for the upgrade. Upon Equant’s request, Customer will submit an Order (or a change Order, as applicable) to upgrade the traffic volume limitation; or

(ii) invoice Customer for the additional cost plus 5% (and Customer will pay such additional charges) that Equant incurred from the DSL Access provider as a result of Customer exceeding the traffic volume limitation, if an upgrade to Customer’s traffic volume profile is not possible or if Customer refuses to upgrade its traffic volume profile.

Also, in some countries DSL Access is subject to a post-order qualification or testing process, pursuant to which the DSL Access provider will evaluate whether the DSL Access ordered can be supported at the

Location(s). If for any reason the DSL Access requested or ordered by Customer is rejected by the DSL Access provider as a result of the post-order qualification or testing process, then the Parties will negotiate in good faith to find an alternative solution, which may include the provision of DSL Access at speeds other than those requested or ordered by Customer or the provision of a leased line in lieu of DSL Access. Any alternative solution agreed upon by the Parties and any changes to the Charges required by such alternative solution will be set forth in a writing signed by the Parties.

3.3. **Resilient Configuration Options.** Equant offers the following resilient configuration options for LAN Access:

(a) **ISDN Dial Back-Up.** ISDN Dial Back-up provides Service continuity when failure occurs on the Tail Circuit between the Location and the Equant access node (i.e., X. 25, Frame Relay or ATM). In case of failure, the ISDN Dial backup equipment automatically detects the failure and establishes the ISDN or PSTN backup connection. The backup connection is always established from the Equant side of the Equant Network to the Location. All the traffic is then brought through the ISDN or PSTN connection without any change regarding the IP routing. Because of the time required to establish the backup connection, some delay-sensitive applications may lose their session and request a new one. Usage of the ISDN circuit will be routinely checked to ensure that it is used only as a contingency solution and not for unauthorized primary access; Customer will pay for all unauthorized usage plus a penalty of \$5.00 per minute for such usage. ISDN installation and rental charges at the Location are Customer’s responsibility.

(b) **Mission-Critical Locations.** The Mission-critical Locations option enables Customer to specify a highly resilient LAN router configuration for mission-critical Locations designated by Customer. Equant will implement a dual-router configuration that shares traffic between routers (load balancing mode) or configure one router to handle all traffic with the other in “hot standby” mode. The exact configuration depends on the specific LAN environment. If one router fails, switch-over to the other router is automatic for minimal disruption.

(c) **Warm Standby.** This option provides PSTN/ISDN backup into a dial access port (either PAD or NAS) that the router can use to automatically dial around a faulty router, node or leased line.

(d) **ISDN Around the Cloud.** ISDN Around the Cloud option is based on public ISDN service and enables by-passing of the Equant Network. For the remote Location (secured site), Equant provides a single CE router with ISDN connection capability. In case of failure, the CE router automatically detects the unavailability of the access and establishes the end-to-end ISDN backup connection directly to the Internet Access router (“IAR”) of the central Location selected by Customer. The CE router then routes the IP traffic through the backup connection. For the central Location access, a specific router, dedicated to the IAC backup, is provided by Equant and is supporting the dial backup traffic from diverse remote Locations. Monitoring of the backup is handled by out of band management either via specific PSTN line and modem or via an available ISDN B channel. Additional charges apply for the installation, provision and maintenance of the modem. ISDN installation, rental and usage charges at the Location are Customer’s responsibility.

3.4 **Selected Locations.** The Selected Locations option enables Customer to retain responsibility for the configuration and management of some of the routers in its LAN while transferring the management responsibility for the other routers to Equant. In both cases, Equant will supply and manage the X.25, ATM or Frame Relay connectivity. For routers managed by Customer, Equant will initially configure the router to operate in the LAN Access VPN, but Customer is responsible for the ongoing operation of the routers. In no event will the routers managed by Customer exceed 20% of the total number of routers included in Customer’s VPN.

**3.5 Telnet and Customer SNMP Router Access.** This option provides Customer with read-only access to the LAN Access CE routers on its VPN. For Customer SNMP Router Access, Customer's Simple Network Management Protocol ("SNMP") manager will poll these CE routers to determine the status of TCP/IP devices. For Telnet access, Customer may access the console sub-system in a non-privileged mode, using a password and username. Telnet access will be restricted to 4 designated Customer workstations, for which Customer must provide the IP addresses to Equant. Customer will not receive access to configuration data, read router access lists, log messages or other information, as determined by Equant in its sole discretion.

**3.6 24-Hour Maintenance Coverage.** This option provides maintenance support on a 24x7x365 basis in select countries.

**3.7 Equant IP Dial.** Equant's Private Dial Service (as described in a separate Service Description attached to this Agreement) enables Customer's remote PC Users to access Customer's LANs. The access method will be either ISDN (with speeds of up to 128 kbps, using two 64 kbps channels) or PSTN (with speeds of up to 56 kbps). The Frame Relay or X.25 router connected to the LAN acts as the point-to-point ("PPP") server to the remote Users' PCs. To use this option, each remote User's PC must support either (i) a three-way handshaking procedure ("Challenge Handshake Authentication Protocol") in which the server sends a challenge message to the originator, who is required to input the appropriate response, or (ii) a two-way handshaking procedure ("Password Authentication Protocol") in which a username/password pair is set to the server for authentication. There is no protection against playback or repeated trial and error attacks to gain unauthorized access. Also, the User's PC must be equipped with the following:

- A high-speed V.32 or V.34 modem;
- Full LAN application software (e.g., TCP/IP); and
- A PPP protocol stack.

**3.8 Prioritization and Queuing.**

(a) **Custom Queuing.** Custom queuing allows Customer to prioritize traffic by reserving a percentage of bandwidth (as a number of bytes or packets) for specified LAN protocols. Frame Relay traffic shaping is implemented in conjunction with Customer output queuing to provide effective mapping of the underlying Frame Relay parameters to the transmission characteristics of the CE router.

(e) **Priority Queuing.** Priority queuing allows Customer to define 4 priorities, which will be assigned to outgoing traffic via a queue by an access-list mechanism. This ensures that the highest-priority data is not delayed by lower-priority traffic during periods of congestion. Frame Relay traffic shaping is implemented in conjunction with priority queuing to provide effective mapping of the underlying Frame Relay parameters to the transmission characteristics of the CE router.

**3.9 Managing an Existing Router Network.** LAN Access is available on a case-by-case basis to customers who have already implemented a router network. Subject to an audit of the existing equipment by Equant, for which Equant may charge and Customer will pay, Equant may agree to maintain and manage the routers and provide the same features and functionality of the full LAN Access Service, provided that the routers meet the necessary requirements to support LAN Access.

**3.10 Cascaded Links.** Cascaded Links allows Customer to use a spare or supplementary port on the LAN Access CE routers to connect serial devices to the VPN. This feature supports encapsulation of X.25 in IP, X.25 switching, and Frame Relay switching both locally and through to the WAN. If Customer elects to receive out-of-band management for cascaded routers, then Customer must provide a modem with a port on the PSTN line to enable Equant to access such routers.

**3.11 Dial-on-Demand Routing.** Dial-on-demand routing allows remote routers to access Customer's LAN using Equant's Private Dial Service, similar to a remote PC. Such routers are reactively managed using an out-of-band management connection.

**3.12 Out-of-Band Management.** Out-of-band management

provides Equant with a management path to Customer's LAN Access router that is not directly connected to the Equant Network and with a supplementary path to directly connected routers. Out-of-band management enables Equant to reach dial-on-demand routers or cascaded routers in the event of a failure of the IP path to those routers, enabling diagnosis of problems and service restoration.

**3.13 LAN VPN.** The LAN VPN option provides Customer with operations management of the LAN.

**3.13.1 Standard Features.** The standard features of the LAN VPN include: (i) Layer 2 Ethernet switching and Layer 3 routing for cable connections, and (ii) installation, configuration, testing and support and maintenance of the LAN CPE. Alternatively, Customer may select the LAN VPN "Service-Only" option, which allows Customer to provide the equipment needed for the LAN VPN that would otherwise be provided by Equant as CPE. If Customer elects to receive the LAN VPN Service-only option, the LAN VPN will not include CPE provisioning, installation, and maintenance; however, Equant will examine, test and re-configure, if needed, Customer's equipment to ensure that such equipment meets Equant's standards and requirements for the LAN VPN. With the Service-only option, Customer's equipment must be maintained by Equant under Equant's Maintenance and Support Services, which will be described in a separate Service Description attached to this Agreement.

**3.13.2 Optional Features.** In addition to the standard features, the LAN VPN includes the following options:

(a) **Cabling Audit and Deployment.** Equant will conduct a visual inspection of the in-house cabling at the Location to determine if such Location meets the specifications for the LAN VPN; the minimum requirement is Category 5E twisted pair cabling. If needed, Equant will deploy the in-house cabling for the LAN VPN. For redundant configurations, alternative cabling routes within the Location are required.

(b) **In-line Powering for IP Phones.** Equant will provide the in-line-power feature for Customer's IP phones from the Ethernet cabling used to provide the LAN VPN.

(c) **On-Site LAN Management.** Equant will provide an on-site LAN manager to support day-to-day LAN operations at the relevant Location(s).

(d) **Location Migration Services.** Depending on the nature, design and size of Customer's LAN VPN, Equant in its reasonable discretion may require project management and consulting services in addition to the life cycle management in order to implement and support the LAN VPN. Equant also will provide additional project management and consulting services upon Customer's request.

**3.13.3 Service Requirements.** Customer must subscribe to the Equant Extended Fault Management and Extended Service Management Services, and the minimum Service Term of any Order for LAN VPN is 3 years. Customer hereby expressly authorizes Equant to establish and implement any management VLAN(s) needed to enable management of the LAN.

**3.13.4 Service Exclusions.** LAN VPN will not apply to any Selected Locations or Customer-managed LAN Access routers. LAN VPN also does not include changes to the cabling, except as expressly provided as an optional feature above. LAN VPN does not include any desktop services.

**3.14 VPN Bridge.** If Customer receives Equant's Extended Service Management Service for LAN Access, then Customer may order the VPN Bridge described in the Service Description for Equant Frame Relay or ATM Service for its LAN Access VPN; provided that the VPN Bridge may not apply to Selected Locations or Customer-managed LAN Access routers. In connection with the LAN Access VPN, the IP Link (as defined in the Service Description for Equant Frame Relay or ATM Service) will be managed by Equant.

**4. Limitations of Equant LAN Access Services.** Security of Customer's network is enhanced by establishing routing policies, the

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virtual interface feature, and the use of extended access lists for packet filtering. The detailed configuration of these extended access lists will be agreed with Customer prior to service implementation predicated on specific Location requirements and inter-network operating systems (IOS) capabilities. Customer access lists will be implemented on the gate router and will complement Equant's standard access lists. The security of LAN Access will have the following features:

- No spoofing of Customer addresses in-bound from the Internet;
- No spoofing of network addresses outbound from Customer; and
- Equant cannot guarantee that a packet from the Internet is not a "spoof" of another valid public Internet address. Therefore, Equant recommends that Customer provide a separate application level firewall for its own protection. To facilitate this, the VPN gateway

router should be dedicated to the Internet connection.

5. **Acceptance Testing.** Equant will demonstrate the successful end-to-end communication between any two LAN Access CE routers provided by Equant with single connections to the Equant Network through a standard router management test. Upon initiation of the test at the near-end router, 5 test packets will be forwarded, checked and returned from the distant-end router via the Equant Network. At the near-end router, receipt of error-free test packets, indicating transmission elapse and time measurement periods between routers, will verify successful end-to-end communication between the routers involved.

**END OF SERVICE DESCRIPTION FOR EQUANT LAN ACCESS SERVICE**