

### 1.3.4 Non-domestic Services [L.34.1.3.4]

*Agencies are able to complete mission-critical tasks overseas using a broad array of high-quality telecommunications and information technology (IT) products and services on a global network. For voice communications, the network serves all countries. In addition, Agencies have access to locally available services [REDACTED]*

*[REDACTED] Through its extensive network facilities and carrier arrangements, AT&T provides non-domestic customers with in-country dedicated, dial-up and wireless access, as well as international connectivity and in-region data centers. Federal customers in non-domestic locations benefit from direct support by multilingual in-region customer care centers.*

This section covers the following aspects of AT&T's non-domestic services:

- Current AT&T-owned network and customer care facilities and associated coverage
- Current AT&T non-domestic bilateral and other carrier arrangements (Appendix D) used to complement AT&T's existing infrastructure for non-domestic services
- Current non-domestic service availability by country (Table 1.3.4-1)
- Current non-domestic infrastructure security measures
- Current arrangements for interoperability of services between domestic and non-domestic locations<sup>1</sup>
- Future plans to extend AT&T non-domestic services

In this technical section, including any associated tables and appendices, AT&T describes a range of services that AT&T provides or



*The Yankee Group survey of more than 1,000 multinational firms ranked AT&T the "number one provider" for the provisioning of global network services.*

*--The Yankee Group*

<sup>1</sup> Non-domestic facilities and operations may be subject to change resulting, for example, from changed circumstances in a particular international area.

may provide to its largest commercial customers. For purposes of this proposal, AT&T is only offering those non-domestic services for which AT&T has included CLINs in the Pricing Volume, Section B.

AT&T's international goal is to offer a comprehensive array of products and services in every country in the world that are delivered over a single AT&T Global Network (AGN). The AGN's broad geographic coverage provides high-quality, end-to-end services worldwide with dedicated access from more than 50 non-domestic countries. To complement the vast service and coverage scope of the AGN and to leverage the growing worldwide trend toward a more open telecom regulatory environment, AT&T has established attractive service arrangements with various non-domestic carriers. These arrangements extend our in-country, non-domestic coverage to [REDACTED]

Agencies can take advantage of AT&T's AGN and carrier arrangements to implement a global strategy that is cost-effective, provides expansive non-domestic reach, and offers high-quality, high-performance services. AT&T continues to invest globally to support its commitment to provide customers with seamless global capabilities. As our global network's reach continues to expand over time, we rely less and less on bilateral and other carrier arrangements.

This increasing use of the AGN and decreasing dependence on other carriers results in optimal end-to-end service management and improved performance levels.

In countries where telecom regulations permit and based upon market conditions, AT&T deploys its global network and offers a full portfolio of

## Gartner

*AT&T remains the only Network Service Provider to be listed in the "Leader Quadrant" in all four of Gartner's NSP Magic Quadrants covering Europe, Asia Pacific, U.S. and Worldwide NSPs.*

--Gartner

services at the highest quality standards commercially available, such as Managed/IP Services, Frame Relay/Asynchronous Transfer Mode (FR/ATM), and International Private Lines (IPLs [REDACTED])

[REDACTED]

[REDACTED]

[REDACTED]

AT&T achieves its extensive international reach and service by integrating its own network facilities and resources with the networks of other carriers.

Comprising the integrated global capabilities are the following:

- In-country AT&T nodes or points-of-presence (POPs) for dedicated and dial access
- In-region AT&T Internet Data Centers (IDCs)
- In-country AT&T Customer Care centers
- Offshore carrier access arrangements
- Regional private line extensions
- Bilateral network interconnects for voice and data services
- Global public and private peering arrangements
- International Private Lines (IPLs)
- Cellular roaming arrangements
- Remote Access arrangements with other carriers (for dial, Wi-Fi, DSL, wired Ethernet, and cellular wireless data)
- Global networks of subcontractors on the AT&T Networx Team

In the case of AT&T-owned-and-operated network facilities, we deliver a full portfolio of industry-leading non-domestic services through means presented below (**Table 1.3.4-1**).

*Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal*

Region	Country																					Total	Avg
	North			South			East			West			Central			Other							
	Sub-Region 1	Sub-Region 2	Sub-Region 3	Sub-Region 4	Sub-Region 5	Sub-Region 6	Sub-Region 7	Sub-Region 8	Sub-Region 9	Sub-Region 10	Sub-Region 11	Sub-Region 12	Sub-Region 13	Sub-Region 14	Sub-Region 15	Sub-Region 16	Sub-Region 17	Sub-Region 18	Sub-Region 19	Sub-Region 20			
Region A	10	20	30	15	25	35	10	20	30	15	25	35	10	20	30	15	25	35	10	20	30		
Region B	12	22	32	17	27	37	12	22	32	17	27	37	12	22	32	17	27	37	12	22	32		
Region C	14	24	34	19	29	39	14	24	34	19	29	39	14	24	34	19	29	39	14	24	34		
Region D	16	26	36	21	31	41	16	26	36	21	31	41	16	26	36	21	31	41	16	26	36		
Region E	18	28	38	23	33	43	18	28	38	23	33	43	18	28	38	23	33	43	18	28	38		
Region F	20	30	40	25	35	45	20	30	40	25	35	45	20	30	40	25	35	45	20	30	40		
Region G	22	32	42	27	37	47	22	32	42	27	37	47	22	32	42	27	37	47	22	32	42		
Region H	24	34	44	29	39	49	24	34	44	29	39	49	24	34	44	29	39	49	24	34	44		
Region I	26	36	46	31	41	51	26	36	46	31	41	51	26	36	46	31	41	51	26	36	46		
Region J	28	38	48	33	43	53	28	38	48	33	43	53	28	38	48	33	43	53	28	38	48		
Region K	30	40	50	35	45	55	30	40	50	35	45	55	30	40	50	35	45	55	30	40	50		
Region L	32	42	52	37	47	57	32	42	52	37	47	57	32	42	52	37	47	57	32	42	52		
Region M	34	44	54	39	49	59	34	44	54	39	49	59	34	44	54	39	49	59	34	44	54		
Region N	36	46	56	41	51	61	36	46	56	41	51	61	36	46	56	41	51	61	36	46	56		
Region O	38	48	58	43	53	63	38	48	58	43	53	63	38	48	58	43	53	63	38	48	58		
Region P	40	50	60	45	55	65	40	50	60	45	55	65	40	50	60	45	55	65	40	50	60		
Region Q	42	52	62	47	57	67	42	52	62	47	57	67	42	52	62	47	57	67	42	52	62		
Region R	44	54	64	49	59	69	44	54	64	49	59	69	44	54	64	49	59	69	44	54	64		
Region S	46	56	66	51	61	71	46	56	66	51	61	71	46	56	66	51	61	71	46	56	66		
Region T	48	58	68	53	63	73	48	58	68	53	63	73	48	58	68	53	63	73	48	58	68		
Region U	50	60	70	55	65	75	50	60	70	55	65	75	50	60	70	55	65	75	50	60	70		
Region V	52	62	72	57	67	77	52	62	72	57	67	77	52	62	72	57	67	77	52	62	72		
Region W	54	64	74	59	69	79	54	64	74	59	69	79	54	64	74	59	69	79	54	64	74		
Region X	56	66	76	61	71	81	56	66	76	61	71	81	56	66	76	61	71	81	56	66	76		

	Categorization																					Total	Average
	Category A									Category B							Category C						
	Sub A1	Sub A2	Sub A3	Sub A4	Sub A5	Sub A6	Sub A7	Sub A8	Sub A9	Sub B1	Sub B2	Sub B3	Sub B4	Sub B5	Sub B6	Sub B7	Sub C1	Sub C2	Sub C3	Sub C4	Sub C5		
Item 1	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210		
Item 2	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165	175	185	195	205	215		
Item 3	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220		
Item 4	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165	175	185	195	205	215	225		
Item 5	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230		
Item 6	35	45	55	65	75	85	95	105	115	125	135	145	155	165	175	185	195	205	215	225	235		
Item 7	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240		
Item 8	45	55	65	75	85	95	105	115	125	135	145	155	165	175	185	195	205	215	225	235	245		
Item 9	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250		
Item 10	55	65	75	85	95	105	115	125	135	145	155	165	175	185	195	205	215	225	235	245	255		
Item 11	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260		
Item 12	65	75	85	95	105	115	125	135	145	155	165	175	185	195	205	215	225	235	245	255	265		
Item 13	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270		
Item 14	75	85	95	105	115	125	135	145	155	165	175	185	195	205	215	225	235	245	255	265	275		
Item 15	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280		
Item 16	85	95	105	115	125	135	145	155	165	175	185	195	205	215	225	235	245	255	265	275	285		
Item 17	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290		
Item 18	95	105	115	125	135	145	155	165	175	185	195	205	215	225	235	245	255	265	275	285	295		
Item 19	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300		
Item 20	105	115	125	135	145	155	165	175	185	195	205	215	225	235	245	255	265	275	285	295	305		
Item 21	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310		
Item 22	115	125	135	145	155	165	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315		

*Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal*

Information as of May 30, 2006

	Mandatory country per Traffic Model or Attachment J.2 (including Amendment 5, Table J.2.2-9)
✓	Available
○	Planned 2005-2007
+	Available via international private line access
●	Service not currently available, but can be negotiated/implemented through bilateral carrier arrangements upon receipt of task order(s)



Where services are provided through AT&T relationships with other facility providers, the means of delivery may vary. **Table 1.3.4-1** presents the telecommunications and IT products and services available globally through AT&T. AT&T engages local resources for sales, engineering, customer service, and operations to support our non-domestic services.

### 1.3.4.1 In-country AT&T POPs

Agencies can utilize dedicated access for layer 2 and layer 3 data/IP services, as well as voice services, supported by AT&T. **Table 1.3.4.1-1** on the following page lists AT&T's current international POP coverage by region, country, and city.

### 1.3.4.2 Regional Private Line Extensions

To extend its global network footprint, AT&T uses cross-border private line extensions to neighboring countries where an in-country AGN POP does not exist. Through these private line extensions an Agency can connect its site(s) on a dedicated basis to an

AT&T POP, and thereby gain access to Layer 2

(e.g., ATM and Frame Relay) and Layer 3 (IP)

services. For example, a customer's site(s) in

Bolivia, Paraguay, and Uruguay are connected

via private line extensions to the AT&T POP in Buenos Aires and Argentina.

**Table 1.3.4.2-1** lists non-domestic locations served through regional private line extensions.

REGION	ACCESS COUNTRY	AT&T POP PRIVATE LINE EXTENSION HOMED TO
Americas	Bolivia (1)	Santiago, Chile
	Paraguay (1)	Buenos Aires, Argentina
	Uruguay	Buenos Aires, Argentina
Eastern Europe	Estonia	Helsinki, Finland
	Latvia	Helsinki, Finland
	Lithuania	Helsinki, Finland

**Note 1:** Currently offered on ICB basis. See Table 1.3.4.d.3-1 (Planned New Private Line Extension Arrangements), for planned availability date of standard commercial service offering.

**Table 1.3.4.2-1: Countries Served by Regional Private Line Extensions.** Agencies will access customer sites using regional private line extensions.

Table 1.3.4.3-1 AT&T's Non-domestic POP coverage by region, country and city.

### 1.3.4.3 In-Region AT&T Remote Dial Access

Along with dedicated access, government Agencies can obtain remote dial IP access via in-country AT&T POPs [REDACTED]

(Table 1.3.4.3-1). [REDACTED]

[REDACTED] are in place to connect customers to the Internet, or Agency intranets. For users traveling to countries outside of their home geographic region, AT&T offers an out-of-region roaming service for access to the Internet via an AT&T POP. Customers will incur applicable roaming charges when accessing AT&T-managed dial facilities in regions other than the home region where the user's ID is registered. Roaming charges do not apply when customers travel within their home global region. AT&T roaming services cover five global regions:

- North America (U.S. and Canada)
- Latin America (South America, Mexico, Curacao)
- EMEA (Europe, Middle East & Africa)
- Asia Pacific
- People's Republic of China (PRC)


### 1.3.4.4 In-Region AT&T Internet Data Centers


To serve the collocation and hosting needs of non-domestic customers, AT&T has established [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] Such in-region hosting eliminates international delays

(roundtrip delay) that occur when websites or applications are hosted in the U.S. and end-users are located offshore.

#### **1.3.4.5 In-country AT&T Customer Care Centers**

An Agency's first point of contact for customer service will be an AT&T Customer Access Management Center (CAMC) designated to serve the country in which the Agency is operating. **Figure 1.3.4.5-1** shows 



**Figure 1.3.4.5-1: Global Customer Care Help Desks.** 


Further level 3 operational support to our Global Network Operations Center (GNOC) in the U.S. is provided by regional AT&T Network Operations Centers (NOCs) [REDACTED]

#### **1.3.4.a Non-domestic and International Carrier Agreements**

- (a) Describe the arrangements the offeror has with foreign (non-domestic) communications carriers, service providers and "roaming" partners, including at a minimum, the performance standards associated with such arrangements.

AT&T has established bilateral agreements for voice direct connections with approximately [REDACTED] carriers worldwide. For these voice interconnections, the technical standards and methods of operations applied and used in the provision of telecommunications services conform to the current relevant recommendations of the International Telecommunications Union - Telecommunications Section ("ITU-T"), then in effect, including any applicable International Telegraph and Telephone Consultative Committee (C.C.I.T.T.) recommendations remaining in effect.

Supporting these carrier direct connections is the AT&T Worldwide Intelligent Network, a TDM based platform that conforms to ITU recommendations in the Q.7XX series for SS7 signaling (White Book version 2). For optimal service performance and reliability, AT&T has established Quality of Service (QoS) measurements in 4 critical areas to track performance of the international voice network, as follows:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Utilizing these QoS measurements provides AT&T with an overall view of network performance with any given carrier or area of the world, alerts us to long term maintenance problems, helps us plan the proper size of the network, and lets us analyze calling patterns for efficient use of resources.

For Layer 2 and Layer 3 data service interconnections, AT&T incorporates various interoperability specifications established by The ATM Forum, as well as the MPLS & Frame Relay Alliance, which have been widely deployed by the industry. In the case of data service access agreements, AT&T negotiates Service Level Objectives (SLOs) with such access carriers. These agreements and the associated SLOs [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

To further expand the service scope and geographic reach of its extensive global network, AT&T has established various types of carrier agreements. The remainder of this section describes these arrangements to provide expanded telecommunications and information technology services for non-domestic locations.

#### **1.3.4.a.1 Offshore Carrier Access Arrangements**

To extend the access reach of the core AGN, AT&T has established interconnections with the networks of other intracountry or intraregion carriers. These extended POP (E-POP) arrangements add geographic coverage granularity and allow AT&T to offer a competitive, dedicated access

service in many more secondary cities. [REDACTED]

[REDACTED] Several additional E-POP arrangements are underway to further expand AT&T's non-domestic access footprint (see Section 1.3.4.D.2).

#### **1.3.4.a.2 Bilateral Network Interconnects for Voice and Data Services**

Through bilateral interconnections with carriers in other countries, AT&T extends the global reach of its voice and data service offerings. A list of bilateral carrier agreements for voice services to non-domestic locations is provided in Appendix D, Table D-1. These voice bilateral interconnects carry the following AT&T voice services to or from non-domestic locations:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**Table 1.3.4-1** in Section 1.3.4 above provides details on country availability for the above voice services.

Appendix D, Table D.4-1 lists current bilateral agreements by country/carrier for non-domestic Frame Relay services. For data services, Agencies will benefit from AT&T's ongoing international expansion of the AGN, which decreases the need for bilateral arrangements and allows us to deliver full end-to-end service and performance guarantees. [REDACTED]

[REDACTED]

[REDACTED]

#### **1.3.4.a.3 Global Public and Private Peering Arrangements For IP Services**

In order to provide its IP customers with complete Internet routing, excellent service performance, and, ideally, the shortest routing path, AT&T has established public and private peering arrangements (i.e., interconnections) with other Internet Service Providers (ISPs) worldwide. For efficient Internet traffic routing in non-domestic locations that minimizes latency, AT&T has established [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

#### **1.3.4.a.4 International Private Lines (IPLs)**

Agencies can secure IPL services for point-to-point connectivity [REDACTED]

[REDACTED] Under our half-channel service, AT&T provides the U.S. end of the circuit and a non-domestic in-country carrier (with whom AT&T has established a bilateral agreement) provides the non-domestic end. However, to simplify support for the service, AT&T has established one-stop-shopping arrangements [REDACTED]

[REDACTED]

[REDACTED] AT&T's One-Stop Shopping provides a single point of contact for ordering and a single bill in the currency of choice, thereby simplifying the management of an Agency's international communications.

AT&T's IPL services can be implemented using landline facilities, transoceanic cable systems, and/or satellite capacity. AT&T currently has ownership or lease arrangements in several transoceanic cable systems,



allowing Agencies to connect their offices [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] provides Agencies diversity from their existing terrestrial private line services and the ability to reach countries with no or limited terrestrial fiber infrastructure (e.g., Africa, the Middle East, and central Asia). Agencies can choose from a half-channel or full-channel satellite PLS. The half-channel service is available [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

#### **1.3.4.a.5 Remote Access**

To better serve remote users in non-domestic locations, AT&T extends the reach of its own dial IP and IP VPN services with various access solutions described below.

##### **1.3.4.a.5.1 Extended Dial Access**

Extended Dial Access expands our remote coverage [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] With Extended Dial Access, traveling Government users can roam off the core AT&T dial access network, thus benefiting from a greater dial access footprint.

#### 1.3.4.a.5.2 DSL Access

████████████████████ AT&T's Remote Access Service portfolio currently includes DSL access (as addressed under Broadband Access Arrangement or Broadband Access Services, as applicable, in the Networx RFP) for premise and network based IP VPN services in various European and Asia-Pacific countries, as shown in Appendix D, Table D.5-1.

#### 1.3.4.a.5.3 Wi-Fi Access

AT&T currently offers Wi-Fi Access (as addressed under Multimode/Wireless LAN Service in the Networx RFP) from more than 12,000 hotspots worldwide, of which nearly 6,000 are in 41 non-domestic countries. These hotspots include select airports, hotels, convention centers, and other secondary locations like cafes and bookstores. The capabilities of AT&T's Wi-Fi Access offering are globally consistent. Our Wi-Fi access point locations will continue to grow through 2005. Non-domestic locations where Wi-Fi is currently offered include the ██████████ countries shown below:

██████████	██████████	██████████
██████████	██████████	██████████
██████████	██████████	██████████
██████████	██████████	██████████
██████████	██████████	██████████
██████████	██████████	██████████
██████████	██████████	██████████
██████████	██████████	██████████
██████████	██████████	██████████
██████████	██████████	██████████
██████████	██████████	██████████
██████████	██████████	██████████
██████████	██████████	██████████

[REDACTED] [REDACTED] [REDACTED]  
[REDACTED] [REDACTED] [REDACTED]

#### 1.3.4.a.5.4 Wired Ethernet Access

AT&T also offers Wired Ethernet Access (as addressed under Broadband Access Arrangement or Broadband Access Service, as applicable, in the Networx RFP) from nearly [REDACTED] around the world. Non-domestic locations where Wired Ethernet Access is currently offered include the 16 countries shown below:

[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED] By the end of 2005, AT&T projects that it will support more than [REDACTED] Wi-Fi and Wired Ethernet locations.

AT&T's strategy for Wi-Fi and Wired Ethernet Access is to partner with aggregator providers where possible. These partners hold individual agreements with each of the WISPs (Wireless ISPs) included in the footprint and provide a single, centralized wholesale service to AT&T, which serves to ensure higher consistency for the authentication and billing processes. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

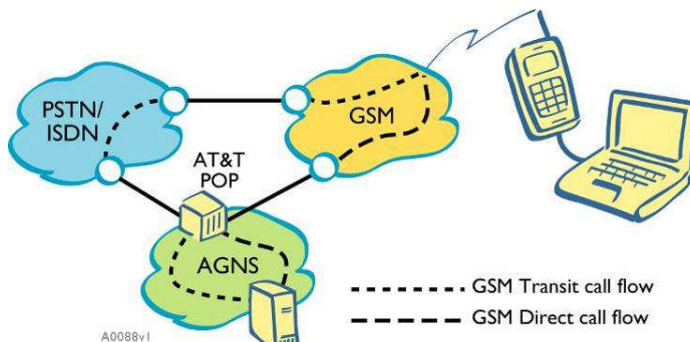
[REDACTED]

[REDACTED]

[REDACTED]

#### 1.3.4.a.5.5 Global System for Mobile Communications (GSM) Direct

**Figure 1.3.4.a-1** illustrates the GSM Direct feature for extending AT&T's Remote Access Services. In most countries, the existing dial infrastructure



**Figure 1.3.4.a-1: Basic GSM Components.** Users simply have to select the special GSM-direct numbers in the AT&T Client and then select their GSM modem in the normal manner. If roaming, users have to ensure they are attached to the chosen network.

supports wireless calls over the public switched telephone network (PSTN). In a number of countries, GSM Direct provides a direct, dedicated link to a local wireless provider's switch (bypassing the PSTN) and enables an

enhanced, all-digital connection for GSM dials users. By using a direct digital connection between AT&T's dial-up nodes and the cellular networks of selected GSM operators, users experience much faster set-up times and better call quality than they do with standard transit call switching. In addition, better on-net pricing may apply to these calls.

[REDACTED]

GSM Direct is currently [REDACTED]

[REDACTED]

**Table 1.3.4.a-1.** [REDACTED]

[REDACTED]

[REDACTED]

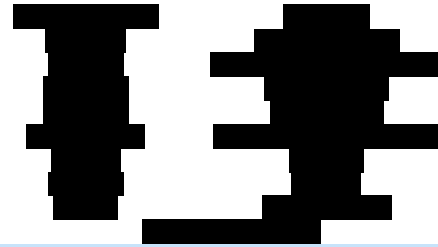
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



**Table 1.3.4.a-1: Non-domestic Providers Supporting GSM.** *By using a direct digital connection between AT&T's dial-up nodes and selected GSM operators' cellular networks, users will experience much faster set-up times and better call quality than via standard transit call switching.*

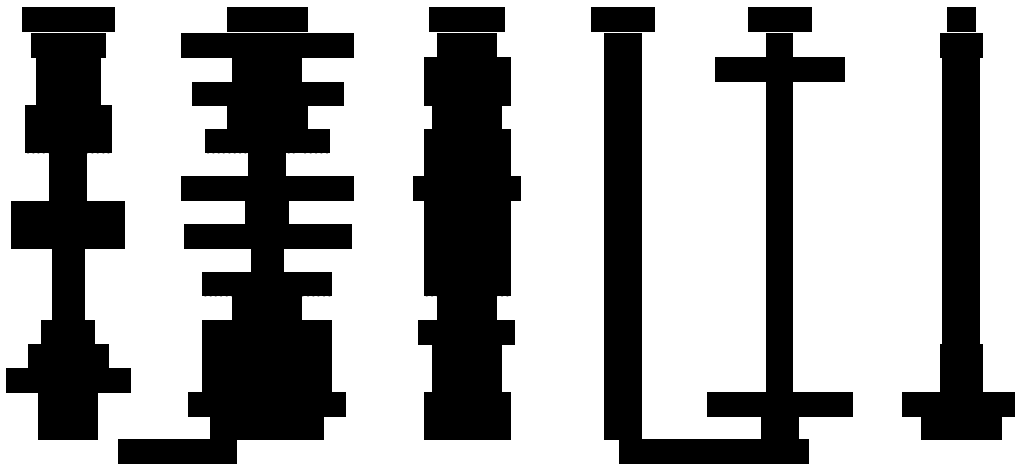
Users of Wireless Application Protocol (WAP) devices can also take advantage of these connections (if the user has access to a WAP gateway either on the Internet or in their corporate network) by configuring their AT&T Remote Access account details in their WAP browser.

#### **1.3.4.a.5.6 Cellular Wireless Data (3G/GPRS/EDGE) Access**

AT&T now supports direct access from cellular packet data services in several European countries and Japan and plans to extend coverage significantly in 2005 and 2006 (**Table 1.3.4.a-2**). This wireless feature allows users to directly connect to the AGN from designated key mobile providers in order to benefit from a managed remote-access mobile solution.

These features allow AT&T remote access dial and broadband users to access the same services and feature sets with the same single sign-on experience within the AT&T Client, using the following new mobile data networks: GPRS (General Packet Radio Services) in Europe, as well as Enhanced Data for GPRS Evolution (EDGE) and Third Generation (3G) where available, and the Air-H network in Japan. Customers benefit from direct managed interconnections between these mobile data networks and

the AGN Remote Access infrastructure to a dedicated AT&T Access Point Name (APN). A new dedicated AT&T gateway is a key element of these facilities and offers the same functional security and features as the dial gateway. The 3G/GPRS/EDGE supports seamless roaming from any of the designated networks, so users are able to access the service from any network they roam in that has a data roaming agreement with their home network. AT&T also has written interface agreements with all designated networks to provide an enhanced support experience.



**Table 1.3.4.a-2: Current and Planned Cellular Wireless Availability.** *Direct wireless connections are expanding to give Agencies access to AT&T managed mobile service.*


Where applicable, the service has been tested by AT&T for each type of access with selected devices.

#### **1.3.4.a.6 Global Networks of Subcontractors on AT&T Networx Team**

While AT&T's global network provides extensive international coverage, AT&T has teamed with Global Crossing specifically for Networx to supplement the AT&T Global Network (AGN). The Global Crossing network

provides services in more [REDACTED]  
[REDACTED] and includes transoceanic fiber capacity that reaches the U.S., Europe, Central and South America, and Asia-Pacific. [REDACTED]  
[REDACTED]

The Global Crossing network, together with the AGN, offers Agencies extended global reach for a range of bandwidth services, in particular for high-bandwidth services such as transoceanic and metro-optical wavelengths, international private lines, dark fiber, and SONET/SDH services.

It is important to note that a Network Security Agreement was signed on September 24, 2003 by Global Crossing, its parent Singapore Technologies Telemedia, and various U.S. government Agencies that included the Federal Bureau of Investigation, the Department of Justice, the Department of Defense, and the Department of Homeland Security. The purpose of the National Security Agreement was to address U.S. law enforcement and national security concerns raised by foreign investment in critical U.S. telecommunications infrastructure. This precedent-setting agreement – designed to evolve over time in conjunction with U.S. security requirements – sets a high bar for network security in the telecommunications industry and covers physical security, logical security, information security, and personnel security. The National Security Agreement is overseen by a Security Committee from Global Crossing's board of directors, and is subject to independent third party audits.

AT&T has also teamed with Cingular Wireless specifically for Networx. Cingular provides international cellular wireless services in nearly [REDACTED]  
[REDACTED] countries through roaming arrangements with more than [REDACTED]  
[REDACTED] as detailed in **Appendix D, Table D-2.**

### 1.3.4.b Non-domestic Infrastructure Security Measures

(b) Describe the infrastructure security measures the offeror has with foreign (non-domestic) communications carriers and service providers.

Agencies will be able to work with a single accountable vendor to provide key telecommunications and information systems with mission critical products and services protected under common security guidelines and practices.

AT&T's comprehensive global security organizations employ common security guidelines and practices, initiatives, processes, procedures, and tools. All these provide physical security for the network's infrastructure as well as logical security.

When working with non-domestic carriers and service providers, AT&T uses the following approaches to enhance infrastructure security:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

AT&T is committed to protecting customers' and its own information and resources from unauthorized access, disclosure, corruption, or disruption of service. This security policy is applicable to network elements, systems, applications, and workstations owned or managed by AT&T.

#### 1.3.4.b.1 Control of Key Infrastructure

AT&T owns and operates key international facilities that house the infrastructure that connects to non-domestic carriers and service providers, thus maintaining direct control over all aspects of security for these locations.





#### 1.3.4.b.2 Infrastructure Security Requirements for Non-domestic Suppliers

Outside the United States, AT&T has built its IP nodes in secure, telco-grade telehousing facilities. Stringent physical and logical security compliance must be demonstrated as presented in **Figure 1.3.4.b-1** with additional details provided in **Table 1.3.4.b-1** by each telecommunication carrier or service provider.

**Figure 1.3.4.b-1: Global Infrastructure Security Requirements for International Carriers.**

**Table 1.3.4.b-1** describes the AT&T security requirements

[illegible]

**Table 1.3.4.b-1: Non-domestic Security Requirements.**

[REDACTED]

AT&T takes the same steps to secure the network elements outside the United States as within its own U.S. IP network. [REDACTED]

[REDACTED]

[REDACTED] These security practices enable AT&T to maintain tight control over who accesses the routers. [REDACTED]

[REDACTED]

AT&T has installed firewalls to protect the network maintenance and monitoring systems from intrusion from the Internet. [REDACTED]

[REDACTED]

The best network security design and implementation must be continuously managed. Therefore, in addition to the above minimum standards, AT&T has established a comprehensive security program to protect data and infrastructure.

### 1.3.4.b.3 Active Security Program

The AT&T Security Program implements AT&T's security policy through a set of initiatives, processes, and procedures executed in each region and, with the guidance and support of the global security team, AT&T administers and coordinates execution of security initiatives. Table 1.3.4.b-2 lists the primary internal processes used to implement the AT&T Security Program.

INTERNAL PROCESSES	STRATEGY, PROCESS DESCRIPTION
Physical access control measures	Strategies to safeguard these assets and in particular the network include: [REDACTED]
Logical access control measures	The following control processes are used to manage the logical access: [REDACTED]
Access validation process	[REDACTED]
Confidentiality	[REDACTED]
Workstation security management	[REDACTED]

Security status checking  
and vulnerability testing

Security status checking

Vulnerability testing

Security advisory process

Security incident reporting  
and management

Security status reporting

Security compliance  
reviews

Security reviews are composed of the following elements:

Internal and external audits	[REDACTED]
Network perimeter protection	[REDACTED]
Intrusion detection	[REDACTED]
Strategy of continuous improvement	[REDACTED]

Table 1.3.4.b-2 AT&T: Security Program.

#### 1.3.4.b.4 Security Leadership Role

To keep pace with industry security developments and meet regulatory and business requirements, AT&T actively participates in several global security organizations including:

- Computer Emergency Response Team/Coordination Center (CERT/CC)
- Security activities within Internet Engineering Task Force (IETF)
- Forum of International Response and Security Teams (FIRST) Team

Within the United States, AT&T participates in the following government and quasi-government organizations:

- National Coordinating Center (NCC), which is part of Homeland Security, for telecommunications
- Network Reliability and Interoperability Council (NRIC)
- National Infrastructure Protection Center (NRIC)
- Information Technology – Information Sharing and Analysis Center (IT-ISAC)

- Network Reliability Steering Committee (NRSC)
- The National Telecommunications and Information Administration (NTIA)
- National Communications System (NCS)
- National Security Telecommunications Advisory Committee (NSTAC)
- InfraGard
- Electronic Crimes Task Force.

#### **1.3.4.c Peering and Bilateral Arrangements**

(c) Describe the arrangements for interoperability of services between domestic and non-domestic locations.

AT&T's international strategy is to provide customers with a single, seamless global IP network that allows Agencies to implement global solutions for services with greater efficiency, effectiveness, and consistency than typically available. This gives Agencies access to the tools, technologies, and capabilities to fully optimize and manage their global network solutions with real-time, end-to-end visibility, and management control. **Figure 1.3.4.c-1** summarizes the global footprint reach provided by our peering arrangements. Robust international interoperability for Networx IP services will be provided to the Government through existing and expanding public and private peering relationships, allowing Agencies to reach users, content and/or applications on the networks of other service providers at commercially available performance levels.

Figure 1.3.4.c-1: AT&T Global IP Network Peering Summary. [REDACTED]

[REDACTED]

AT&T is a Tier 1 ISP and has peering relationships with all major Internet Service Providers. As such, we are constantly evaluating peering with other Tier 1 Internet Service Providers. AT&T's peering architecture is focused on maintaining excellent performance to anywhere on the Internet. [REDACTED]

[REDACTED]

[REDACTED] These relationships provide Agencies with the bandwidth needed to support mission needs.

[REDACTED]

[REDACTED] to reduce the risk of a

loss of direct connectivity in the event of a link failure. As a result, Agency traffic can often be re-routed via an alternate connection. Additional details about AT&T's domestic and global peering capabilities are discussed below and in Section 1.3.2.b, Peering Relationships.

Beyond peering for IP/Internet services, AT&T has established bilateral carrier arrangements (see Section 1.3.4.a, Non-domestic and International Carrier Agreements for a detailed list) for voice, international private line, and frame relay services in order to provide interoperability between the U.S. and non-domestic locations for these services. In the case of voice services via the Public Switched Telephone Network (PSTN), AT&T currently maintains bilateral voice interconnects with [REDACTED]

[REDACTED]

AT&T will continue to support robust interoperability between voice, circuit switched data, combined, and wireless services. AT&T will support connectivity and interoperability for remote and mobile users as specified in the individual service descriptions. Interoperability for future Networx services will be offered to the Government at no additional cost as they become commercially available.

#### **1.3.4.c.1 U.S. Public and Private Peering**

Within the United States, private peering is the most commonly used method of interconnection between major ISPs. As of November 2004, [REDACTED]

[REDACTED]

[REDACTED] (Figure 1.3.4.c-2). [REDACTED]

[REDACTED]



[REDACTED]

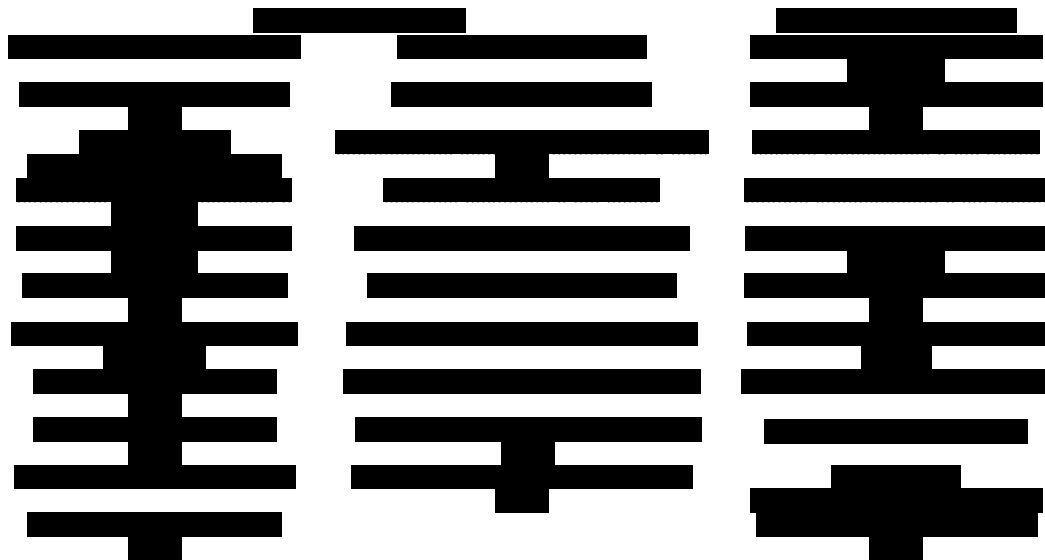
Figure 1.3.4.c-2: Private and Public Peering. [REDACTED]

#### 1.3.4.c.2 Global Peering

The AT&T Global IP Network is connected to other ISPs via massive private peering bandwidth. [REDACTED]

[REDACTED]

Listed in **Table 1.3.4.c-1** below are the non-domestic Network Access Points (NAPs) or Internet Exchange Points (IXPs) where AT&T has public peering (peers with multiple ISPs).

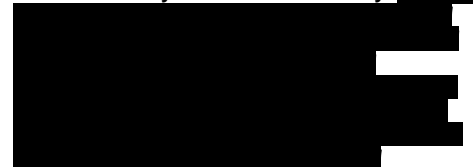


**Table 1.3.4.c-1: AT&T Global IP Network Public Peering.** *The AT&T Global IP Network can reach every network in the global Internet.*

  
 (Figure 1.3.4.c-3).

A key benefit Agencies will have using the AT&T Global IP network is that all traffic between endpoints stays on the AT&T network. Only traffic destined for other networks will use peering links. This offers additional data security and achieves the highest network performance levels.

**Figure 1.3.4.c-3: AT&T Global IP Network-Autonomous System Structure Today.**



### 1.3.4.d Future Plans to Extend Non-domestic Services

(d) Describe the offeror's plans for extending these existing foreign (non-domestic) arrangements and developing new arrangements to support the delivery of services internationally.

To expand its non-domestic services and geographic reach, AT&T's plans include the following:

[REDACTED]

#### 1.3.4.d.1 New in-country AT&T Nodes or Points-of-Presence (PoPs)

During 2005 through 2007, POP expansions are planned for the AGN. The cities/countries for which POPs are scheduled are shown in

**Table 1.3.4.d-1.**

REGION	COUNTRY	CITY	PLANNED AVAILABILITY
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

**Table 1.3.4.d-1: Planned New AT&T Nodes or POP Arrangements.** Agencies will continue to see expansions in AT&T's global service network availability.

#### 1.3.4.d.2 New Offshore

### Carrier Access Arrangements

[REDACTED]

[REDACTED] (Table

1.3.4.d-2).

COUNTRY	PROVIDER	PLANNED AVAILABILITY	COUNTRY	PROVIDER	PLANNED AVAILABILITY
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Table 1.3.4.d-2: Planned New E-POP Arrangements. Agencies will continue to have expanded global service availability.

### 1.3.4.d.3 New Regional Private Line Extensions

[REDACTED]

Table 1.3.4.d-3.

REGION	ACCESS COUNTRY	[REDACTED]	PLANNED AVAILABILITY
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Table 1.3.4.d-3: Planned New Private Line Extension Arrangements. Agencies will continue to see expanded Private Line Service availability.

**1.3.4.d.4 New International Private Line (IPL) Arrangements**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

**1.3.4.d.5 New Remote Access Arrangements**

**Dial Access –** [REDACTED]

[REDACTED]

[REDACTED]

**Wi-Fi and Wired Ethernet –** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

**Table 1.3.4.d-4.**

REGION	COUNTRY OR LOCATIONS	PROVIDER	PLANNED AVAILABILITY
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

**Table 1.3.4.d-4: Planned Wi-Fi Non-domestic Service Expansion.** Government travelers will find an expanded Wi-Fi footprint over time, making it easier to access the Internet and Agency intranets remotely.

**Cellular Wireless Data (3G/GPRS/EDGE) – [REDACTED]**

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

	REGION	COUNTRY OR LOCATIONS	DSL SERVICE CATEGORY	PLANNED AVAILABILITY
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Table

1.3.4.d-5.

Table 1.3.4.d-5: Planned DSL Non-domestic Service Expansion.

[REDACTED]

[REDACTED]