to pay. The Commission has no basis for predicting that one or another of these technologies will emerge as the superior technology, and it should not try. Rather, the soundest approach the Commission could take to ensure the development of new, needed higher-speed technologies is to create a pro-competitive environment in which such new services can emerge -- primarily through the establishment of cost-based pricing and enforcement of the local competition rules. Such a technology-neutral approach is consistent with the pro-competitive dictates of the 1996 Act.

B. Cost-Based Network Charges Are Also Necessary To Encourage Efficient Utilization Of Existing Networks.

The Commission also seeks comment on whether its current rules are encouraging inefficient use of the existing network and whether it should change its rules in response to the rise of Internet telephony. NOI at ¶¶ 315-16. The answer to both questions is "yes," but not for the reasons advanced by some RBOCs.

Those RBOCs claim that packet-switched services are causing serious network congestion. Those claims, however, are greatly exaggerated.[37] To be sure, virtually all of ESPs' traffic today is carried over incumbent LECs' facilities to ESP switching centers. Also, the ILECs' facilities were concededly designed to carry voice traffic of relatively

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[37] "Report of Bell Atlantic on Internet Traffic," June 28, 1996; "Pacific Bell ESP Impact Study," July 2, 1996; Letter from NYNEX to James Schlichting, Chief, Competitive Pricing Division, FCC, dated July 10, 1996; "US West Communications ESP Network Study -- Final Results," October 1, 1996; Amir Atai, Ph.D., and James Gordon, Ph.D., "Impacts of Internet Traffic on LEC Networks and Switching Systems," Red Bank, New Jersey, Bellcore, 1996.

short duration, yet users of information services often stay online for significantly longer periods of time, tying up their phone lines when they do so.

ESPs, however, have convincingly shown that the RBOCs' studies purporting to show network congestion are seriously flawed.[38] Those studies are based on a very small set of selectively chosen exchanges where congestion was abnormally high.[39] Therefore, based on careful examination of the data provided in the RBOCs' own studies, it appears that network congestion is not a significant problem today outside of a very small handful of exchanges.[40]

There is nevertheless a significant risk of congestion in the future if the Commission's policies are not reformed. This risk arises from the fact that switching and transport costs are significantly traffic-sensitive,[41] and that the ESPs' use of those network elements therefore generates additional costs. Yet because the ESPs do not *pay* for access on a traffic-sensitive basis, they have an incentive to use it inefficiently.

For the same reasons, the ILECs do not receive the proper economic signals concerning this increased usage because this class of user is exempt from paying traffic-sensitive charges. The existing ESP exemption thus undermines the incentives that the

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[38] Lee Selwyn and Joseph Laszlo, "The Effect of Internet Use on the Nation's Telephone Network," Economics and Technology, Inc. (January 22, 1997) ("ETI Study").

[39] *See id.*, pp. 19-22.

[40] AT&T agrees with the ETI Study (p. 13) that the overpricing of more efficient trunk-side connections has contributed to the proliferation of business line usage by ESPs.

[41] Comments of AT&T Corp. at 55-60 (January 29, 1997); Reply Comments of AT&T Corp. at 29-33 (February 14, 1997).

ILECs would otherwise have to perform the necessary upgrades to accommodate this increased usage. Both of these effects tend to exacerbate congestion. Thus, although there appears to be little network congestion today, network congestion is *potentially* a problem if uncompensated (or under compensated) usage continues to increase at the rate it has been increasing in recent years.

Moreover, as noted above, the access charge exemption and the resulting artificial cost advantages to ESPs are driving forces behind the rapid migration of traffic from the public switched network to the Internet. Such large-scale migration of traffic to services that are exempt from access charges will put enormous pressure on the remaining users of the public switched network to cross-subsidize this growing use of the network by ESPs. Today, interexchange carriers pay above-cost access charges that are used in part to subsidize the ESPs' use of the network. As traffic continues to migrate to the ESPs -- and it is migrating at a rapid rate -- the minutes of use that generate the revenue to pay for that usage will decline. Under the current access charge regime, that will put upward pressure on access charges, and thus on long distance rates.[42] This in turn will encourage all carriers to promote their Internet offerings and to induce more users to migrate to the networks that do not bear those costs.[43]

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[42] This will result from artificially reducing (1) the growth ("G") factor in the common line formula; (2) the LECs' sharing obligations (to the extent that they have selected a sharing option); and/or (3) measured productivity growth and the "X" factor at subsequent price cap review proceedings.

[43] Indeed, the proliferation of Internet-based services is already blurring the distinction between basic and enhanced services, indicating that the exemption will be increasingly (continued...)

This will inevitably lead to two serious, adverse effects. First, it will separate the market into "haves" and "have-nots" -- *i.e.*, "haves" who have access to ESPs' services and thus can obtain telecommunications and enhanced services at low, subsidized rates, and "have-nots" who remain on the public switched network and pay higher rates.

More ominously, the artificially induced migration of traffic to the Internet will shrink the contribution base for universal service support. Ironically, the growth and popularity of ESPs' packet-switched data services may *increase* the demand for and usage of the public switched network, and yet the costs of carrying out the Commission's universal service priorities would have to be recovered from an ever smaller contribution base.

For all of these reasons, the Commission should require ESPs to pay their fair share, and should no longer exempt them from access charges based solely on the basis of technology they use to provide service.[44] Thus, even if the Commission determines, in the access charge reform docket, not to require TELRIC-based charges (and even if the Commission adopts -- improperly, in AT&T's view -- a flat charge per presubscribed line),

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[43] (...continued)
difficult to administer.

[44] The Commission recognized in 1988 that the exemption given to ESPs constitutes discriminatory treatment vis-a-vis those carriers that must pay access charges, but concluded that "it remains, for the present, not an unreasonable discrimination within the meaning of Section 202(s) of the Communications Act." *Amendments of Part 69 of the Commission's Rules Relating to Enhanced Service Providers*, 3 FCC Rcd. 2631, 2633 (1988). As demonstrated above, the events of the last nine years -- and especially of the last two years -- confirm that maintaining the exemption is indeed "unreasonable discrimination." Moreover, ending the exemption will facilitate consideration of whether and how ESPs should participate in fostering the goal of universal service.

the Commission can and should still address the imbalances created by the current ESP exemption in order to avert the adverse consequences its continuation will create. At a minimum, the Commission can assess TELRIC-based charges on ESPs, as a transitional step until network charges for all access customers are brought down to actual cost.[45]

III. RATIONALIZATION OF NETWORK PRICING WILL NOT ADVERSELY AFFECT THE HEALTH OF THE INFORMATION SERVICES INDUSTRY OR GIVE THE LECS A WINDFALL.

Rationalizing network pricing and assessing cost-based rates on ESPs and ISPs, moreover, will not adversely affect the health of the information services industry as long as the Commission proceeds in a sensible way. As AT&T and others have explained in the access reform docket, the mechanism the Commission should use to set access charges at cost is an immediate reinitialization of price caps so that the access charges paid by all users are based on TELRIC.[46] Significantly, under the TELRIC methodology, access charges would not include nontraffic-sensitive ("NTS") costs like the Common Carrier Line Charge ("CCLC"). Nor would it include non-cost-based charges like the Transport Interconnection Charge ("TIC"). Consistent with TELRIC, therefore, ESPs should pay only for local switching (about 0.21 cents per minute) and for transport (which would vary according to the nature of the facilities used but would be around 0.17 cents per minute) --

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[45] Obviously, the long term viability of this approach would depend on the Commission rapidly moving all access charges to a TELRIC cost basis. Any long term disparity between access prices based on the technology utilized would only give rise to distortions and inefficiencies similar to those of the current access charge structure.

[46] *See* Comments of AT&T Corp., pp. 49-61 (January 29, 1997); Reply Comments of AT&T Corp., pp. 24-34 (February 14, 1997).

a total of approximately 0.38 cents per minute.[47] Whether or not the Commission adopts the proposal to establish TELRIC-based access charges in the access reform docket, the Commission can and should require ESPs to pay these TELRIC-based access charges now.

In the past, the Commission has been understandably reluctant to require ESPs to pay the inflated access charges that the Commission currently permits the LECs to charge to interexchange carriers, on the grounds that such high access charges might radically alter ESPs' rates.[48] That the imposition of TELRIC-based rates will not have this effect is made clear from an examination of data provided in CompuServe's Comments in the access reform proceeding.[49] Based on CompuServe's data, CompuServe is today effectively paying $0.24 cents per minute to the LECs.[50] AT&T estimates that TELRIC-based access charges would increase CompuServe's per minute charges by approximately 0.14 cents per minute -- from 0.24 cents to about 0.38 cents.[51] This increase would translate into an increase in

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[47] *See* Attachment 2 for an illustration of access elements and costs.

[48] *MTS Market Structure Order*, 97 F.C.C. 2d at 715 ("it would be unreasonable immediately to increase as much as tenfold the charges paid by customers who do not presently come under the coverage of the current ENFIA tariffs").

[49] *See* Comments of CompuServe, pp. 10-11 (January 29, 1997). CompuServe is the second largest provider of on-line services in the country, with some 3 million users.

[50] CompuServe indicates that it spends $35,700,000 per year to purchase 85,000 business lines from the LECs; it also indicates that it uses those local lines "in the range of 240 hours per month." Id., p. 11 n.25. Multiplying that out, CompuServe pays 0.24306 cents per minute.

[51] *See* Attachment 2 for a comparison of current charges compared with TELRIC-based charges.

CompuServe's costs of 56 cents per month per customer.[52] Even if CompuServe chose to pass on that cost to its customers, the price increase resulting from cost-based access rates would not be very large.[53] Thus, the change to market-based pricing of access -- and the resulting economic benefits of such access pricing reform -- can be achieved with little if any adverse consumer impact.

This change, moreover, can and should be implemented in a way that does not create a windfall for the ILECs. To that end, as long as IXCs are required to pay access charges in excess of cost, the Commission should mandate an adjustment to the ILECs' price caps to ensure that the addition of ESP access revenues is revenue neutral to the ILECs. Today's access charges are grossly inflated and provide the ILECs with billions of dollars in pure uneconomic subsidy. The flaw in the current system is not that the LECs are under recovering -- far from it. Rather, the flaw in that system is that it results in a rate structure that does not reflect the way the costs are actually incurred. The ILECs should not be allowed to recover a windfall from the correction of that flaw.

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[52] According to CompuServe, it uses about 1,224,000,000 minutes per month (240 hours x 60 minutes x. 85,000 lines). Since it has 3,000,000 subscribers (*see* Compuserve Comments at 10), an additional 0.13694 cents per minute x 1,224,000,000 minutes per month divided by 3,000,000 subscribers comes to 56 cents per month per customer.

[53] According to the Graphic, Visualization, and Usability Center's (GVU) WWW User Survey, the average household income of all Internet subscribers is $59,000. Nearly three-fourths of the respondents are from the U.S. *See* GVU's WWW Users Survey, www.cc.gatech.edu/gvu/user, April 1996. This modest increase in the monthly price is not likely to repress demand significantly among users at this income level.

IV. TRAFFIC GENERATED BY ESPs SHOULD BE CLASSIFIED AS INTERSTATE TRAFFIC SUBJECT TO THE COMMISSION'S JURISDICTION.

The Commission also seeks comment on the scope of its jurisdiction over access charges paid by ESPs, especially in light of "the difficulty of applying jurisdictional divisions . . . to packet-switched networks such as the Internet." NOI at ¶ 315. The answer is that, in part because of that very difficulty, the Commission should adopt a rebuttable presumption that access services provided to an ESP are entirely subject to the Commission's jurisdiction because of their interstate character, but allow that presumption to be rebutted on a showing that the enhanced service for which access is provided is itself intrastate in nature.

Settled case law establishes that when a service or facility (1) has a significant interstate use or character but (2) cannot readily be broken down into distinct interstate and intrastate components, the service or facility can be treated as subject in its entirety to the Commission's jurisdiction under the Communications Act.[54] Both of these conditions are amply satisfied by most enhanced services, in particular Internet and online services.

First, access services provided to most ESPs are not only substantially interstate in character -- as the Commission expressly recognized in finding that ESPs "employ exchange access for jurisdictionally interstate communications"[55] -- but overwhelmingly so.

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[54] *E.g.*, *Louisiana Pub. Serv. Comm'n* v. *FCC*, 476 U.S. 355, 375-79 (1986); *Public Utility Comm'n of Texas* v. *FCC*, 886 F.2d 1325, 1331-34 (D.C. Cir. 1989); *California* v. *FCC*, 39 F.3d 919, 931-933 (9th Cir. 1994), *cert. denied*, 115 S. Ct. 1427 (1995).

[55] *MTS Market Structure Order*, 97 F.C.C. 2d 682, 715 (1983).

For the provision of Internet and online services, for example, the ESP typically routes calls from its POP along a dedicated line to its data center or web server, which is where its "home page" resides. ESPs generally have only a few data centers in the entire country, however, and therefore the caller and the data center are almost always in different states.

For example, AT&T WorldNet has two data centers in the United States, which means that simply accessing WorldNet's home page already involves interstate transmission for virtually all callers. Indeed, when a dial-up customer accesses AT&T's home page, AT&T does not necessarily route that call to the data center that is geographically nearer to the customer.[56]

But even in the small fraction of cases in which a call can reach the ESP's network or home page without crossing state boundaries, during most sessions a customer will still access *applications* and databases that require interstate transmission. For example, when a customer wants to use the Internet to access the home page of a retail business down the street, it is not unusual for that home page to be housed in a server thousands of miles away. Moreover, during a typical session, a customer accesses multiple applications and databases, a large fraction of which are likely to involve interstate transmission. Even a cursory review of the home pages of both large and small Internet service providers reveals literally a "world" of information available at the click of the mouse.[57] Therefore, it cannot

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[56] Attachment 3 provides an illustrative diagram of AT&T WorldNet℠ Service's network, which is representative of how ESPs provide consumer mass market service.

[57] *See, e.g.*, the home pages for ISPs: America Online (www.aol.com); Prodigy (www.prodigy.com); Erol's Internet Service (www.erols.com); and SpectraNet (continued...)

be seriously questioned that the vast majority of ESPs' Internet and online services overwhelmingly involve interstate traffic which falls squarely within the Commission's jurisdiction.

For the same reasons, access services provided for the vast majority of enhanced services applications are just as "interstate" in character as access services provided to interexchange carriers. To be sure, under the Commission's current rules, ESPs benefit from their artificial classification as "end-users," and thus are allowed to buy state-tariffed business lines just like true business users. But the ESPs generally use the LEC's local switching and transport as part of a much more extensive transmission path, just as IXCs do. As already noted, calls to an ESP are typically routed over the local network to the ESP's node, or POP, and from there to a distant data center or Internet site. Thus, such calls made to an ESP do not *terminate* at the ESP's POP, as they would if the ESP were truly a business user. Like an IXC's POP, the ESP's node or POP merely collects traffic for interstate transmission. In fact, the ESPs today use business lines in precisely the same manner that MCI used business lines in providing its Execunet service, prior to the establishment of the current access charge regime.[58]

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[57] (...continued)
(www.spectra.com).

[58] Prior to that time, carriers such as MCI obtained switched access for use in providing long distance service by purchasing line-side service, just as the ESPs do today. *See, e.g., Exchange Network Facilities for Interstate Access*, Memorandum Opinion and Order, 1 FCC Rcd. 618, 619 (1986); 71 F.C.C. 2d 440, 445 (1979). The Commission permitted this arrangement because, at that time, full-feature access services designed for use by competitive interexchange carriers were not available. The Commission mandated the (continued...)

Second, for Internet and online service applications, there is no way to separately identify (much less meter and bill) interstate and intrastate traffic for jurisdictional purposes. *A fortiori*, the LECs providing access to the ESPs likewise cannot possibly determine which calls being made to an ESP are wholly intrastate in character, or interstate.[59] The advent of new product and service platforms that allow customers to perform many different functions at once, coupled with the inability to track which of these applications involve interstate or intrastate communications, means that access services provided to the ESPs for their interstate communications are "inseverable" from access services provided to the ESPs for use in any "intrastate" services.

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[58] (...continued)
development of switched access, however, and in the interim the Commission oversaw a series of transitional access charge arrangements (first the ENFIA tariffs, followed by Feature Group A access and other arrangements, and culminating in today's Feature Group D). In so doing, the Commission considered "the effect of sudden rate increases upon competition and concluded that the phase-in of [the ENFIA tariffs] as OCC revenues increased provided adequate time for OCCs to absorb the increased payments for exchange services." The Commission also found "that the practice of connecting the OCCs to local exchange facilities pursuant to local business exchange tariffs could not continue because the OCCs did not make a contribution to the interstate costs of local exchange service." *See* id. at 620; *see also* id. at 618-24; *Exchange Network Facilities for Interstate Access*, Memorandum Opinion and Order, 71 F.C.C. 2d 440 (1979); *MTS and WATS Market Structure*, Memorandum Opinion and Order, 97 F.C.C. 2d 834, 858-63 (1984) ("OCCs that receive equal access will pay the same per minute charges that are assessed for MTS or WATS usage as equal access becomes available in each end office"); *Investigation of Access and Divestiture Related Tariffs*, Memorandum Opinion and Order, 97 F.C.C. 2d 1082 (1984). In short, the Commission recognized that, as the interexchange market matured and as equal access became available, the interexchange carriers should move to a system in which they paid for the access they used.

[59] *See PUC of Texas* v. *FCC*, 886 F.2d at 1331 (recognizing this inability as key factor in determining that inseparability doctrine applied in that case).

In other contexts, the Commission has recognized that services involving both intrastate and interstate elements -- such as mixed-use special access -- are properly considered interstate in nature for precisely this reason. Most pertinently, the Commission found special access to be an interstate service in large part because attempting to separate the intrastate and interstate traffic "would involve substantial difficulties since . . . the LECs cannot readily measure state and interstate special access traffic . . .," and neither could their customers.[60] The Commission also noted that introducing divided federal-state jurisdiction into an area that has not been jurisdictionally divided in the past would "necessitate significant changes in the LECs' present billing systems," and "would greatly complicate customer bills since both state and interstate charges would apply to each mixed use special access line."[61] Similarly here, for the most prevalent ESP services, it is impossible to separate interstate and intrastate traffic--indeed, both types of communication often take place during the very same "call." Because of this inseverability, *all* access services provided in connection with such services should be presumed to be interstate in character and subject to the Commission's jurisdiction.

Such a presumption, moreover, is supported by sound policy considerations. As explained above, federally imposed, cost-based access charges will remove the existing disincentive for the construction of modern, packet-switched networks; reduce the risk of

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[60] *MTS and WATS Market Structure*, Recommended Decision and Order, 4 FCC Rcd. at 1356; *see also PUC of Texas* v. *FCC*, 886 F.2d at 1331.

[61] *MTS and WATS Market Structure*, Recommended Decision and Order, 4 FCC Rcd. at 1356

future congestion on existing circuit-switched networks; and help protect the revenue base for the universal service fund. Imposition of such charges at the federal level, moreover, will discourage the states from imposing a patchwork of their own access charges on ESPs -- a result that could not only undermine each of these goals, but also hamper the full development and utilization of the Internet.[62]

To be sure, some enhanced services may be completely or almost completely intrastate in character, or their intrastate aspects may be capable of easy identification and separation from their interstate aspects.[63] For example, voice mail could be jurisdictionally intrastate, depending on its network configuration. For these services, and upon a proper showing, the ESP could properly purchase intrastate access (or local network) services, which would not be subject to the Commission's jurisdiction.[64]

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[62] Although the Commission might have authority to preempt such state regulation under the court decisions cited above, AT&T is not requesting such action and, indeed, does not believe there is any need or basis to consider such action here.

[63] *Cf. MTS and WATS Market Structure*, CC Docket Nos. 78-72, 80-286, Recommended Decision and Order, 4 FCC Rcd. 1352 (1989); *MTS and WATS Market Structure*, CC Docket Nos. 78-72, 80-286, Decision and Order, 4 FCC Rcd. 5660 (1989); *Petition of New York Telephone Co. for a Declaratory Ruling with Respect to the Physically Intrastate Private Line and Special Access Channels Utilized for Sales Agents to Computer New York Lottery Communications*, Memorandum Opinion and Order, 5 FCC Rcd. 1080 (Feb. 21, 1990).

[64] The Commission also seeks comment (¶ 315) on metering and billing issues, "given the difficulty of applying jurisdictional divisions or time-sensitive rates to packet-switched networks such as the Internet." With respect to the feasibility of requiring ESPs to pay access charges, metering and billing issues are red herrings. The only issue is how to measure local switching and transport, and the LECs have a system in place for measuring such usage. Indeed, ESPs would receive bills just as the IXCs do today. ESPs, in turn, are certainly capable of billing their customers on a usage-sensitive basis if they choose, as (continued...)

Finally, although the Commission clearly should regulate the prices ESPs pay for network access services, there is no need for the Commission to consider here whether to exercise jurisdiction over any of the services ESPs provide.[65] Indeed, if the Commission adopts cost-based pricing for all users of exchange access -- or at a minimum requires ESPs to pay TELRIC-based access charges -- there will be no need to explore substantive regulation of any services provided on non-traditional networks. The market incentives that cost-based pricing will generate for deployment of new high-speed technologies (provided meaningful local competition is permitted to develop) should send the appropriate signals to suppliers and customers. It would be especially premature for the Commission either to forbear from regulation of new services that constitute "basic" services under the Commission's current rules, or to impose traditional common carrier regulation on them.[66]

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[64] (...continued)
many have done in the past. Even today, many ESPs offer tiered usage plans. For example, America Online offers a Light-Usage Program that allows three hours a month for $9.95, and $2.95 for each additional hour. Prodigy, CompuServe and other providers have similar pricing plans.

[65] *See* NOI ¶ 316 (seeking comment on how new services such as Internet telephony (which appears to be a basic service), as well as real-time streaming of audio and video services over the Internet, "should affect its [the Commission's] analysis")

[66] The Commission also seeks comment (¶ 315) on whether it should distinguish different categories of enhanced and information services for differing regulatory treatment. The answer is no. ESPs use local switching and transport today, and therefore should pay the TELRIC cost of using those services, regardless how their services are classified. Indeed, it has become difficult, if not impossible, to distinguish between the existing regulatory classifications of "basic" and "enhanced" services in today's world of converging communications services.

CONCLUSION

The Commission has before it, in several related dockets, overwhelming evidence that the rational pricing of monopoly LEC network components will create the proper incentives to meet the requirements of the 1996 Act to promote competition in the local exchange and exchange access markets. This docket illustrates the wisdom of that mandate. By pricing the elements of the local network at their actual cost, all entities in the market will receive the proper incentives to upgrade existing networks, develop and deploy new networks and technologies, and build innovative new services to meet customer needs.

For the reasons discussed above, AT&T urges the Commission to issue a Notice of Proposed Rulemaking to eliminate the exemption from Part 69 access charges for enhanced service providers, establish TELRIC pricing for those providers, and adopt a presumption

that all enhanced communications are interstate in nature. AT&T neither recommends nor supports any "regulation" of Internet or online services at this time, and further recommends that the Commission not seek at this time to distinguish between different categories of information or enhanced services for different regulatory treatment.

Respectfully submitted,

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March 24, 1997

ATTACHMENT 1

Comparison of Alternative Access Service Technologies

ALTERNATIVE ACCESS SERVICE TECHNOLOGIES

Technology Comparison:
Probable Relative Capabilities & Limitations

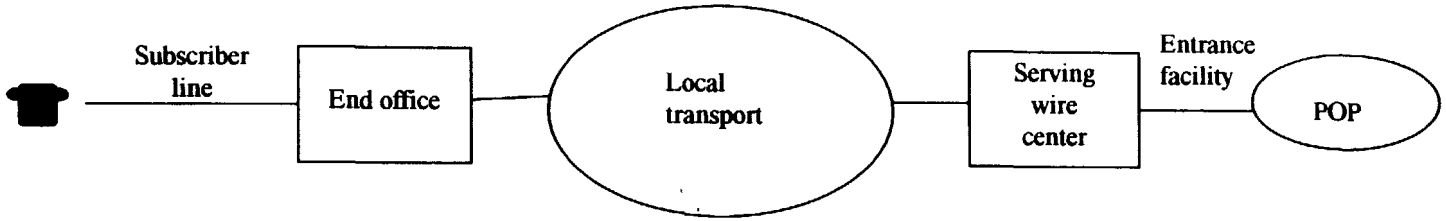
	[illegible]	ISDN	[illegible]	[illegible]	[illegible]	LMDS	MMDS
Downstream Bandwidth	Low	Medium	Very High	Very High	High	High	High
Upstream Bandwidth	Low	Medium	Very High	Medium	Low	Medium	Medium
Maximum Territory Coverage	100%	70%	60%	90%	85%	80%	85%
Range	3 mi	2 mi	3 mi	2 mi	U.S.	1 mi	10+ mi
Customer Cost	Low	Medium	High	Medium	High	Medium	Medium
Likelihood of widespread deployment	Exists	High	Medium	Medium	Exists	Low	Lower

ISDN - Integrated Services Digital Network
DSL - Digital Subscriber Line
HFC - Hybrid Fiber Coax
DBS - Direct Broadcast Satellite
LMDS - Local Multipoint Distribution Service
MMDS - Multichannel Multipoint Distribution Service

ATTACHMENT 2

Illustration of Access Elements and Costs

ILLUSTRATION OF ACCESS ELEMENTS AND COSTS



Current Access Rates: Average Costs (Cents per Minute)[1]

	Subscriber line	End office[2]	Local transport	Entrance facility	Total
IXC	CCLC = 0.78	LS = 0.92 Other TS = 0.12 TIC = 0.69	Combined = 0.28 per minute		2.79
ESP - with exemption	0	0	0[3]	Business line rates, depending on type of connectivity. 0.24/MOU according to CompuServe[4].	0.24+

Cost-based Access Rates: Average Costs (Cents per Minute)[5]

	Subscriber line	End office	Local transport	Entrance facility	Total
IXC	0	LS & signaling = 0.21	Combined = 0.17 per minute		0.38
ESP - with exemption	0	0	0 (See note 2)	Business line rates, depending on type of connectivity	0.24+
ESP - without exemption	0	LS & signaling = 0.21	Combined = 0.17 to 0.27 per minute[6], depending on the type of facilities and connectivity.		0.38 to 0.48

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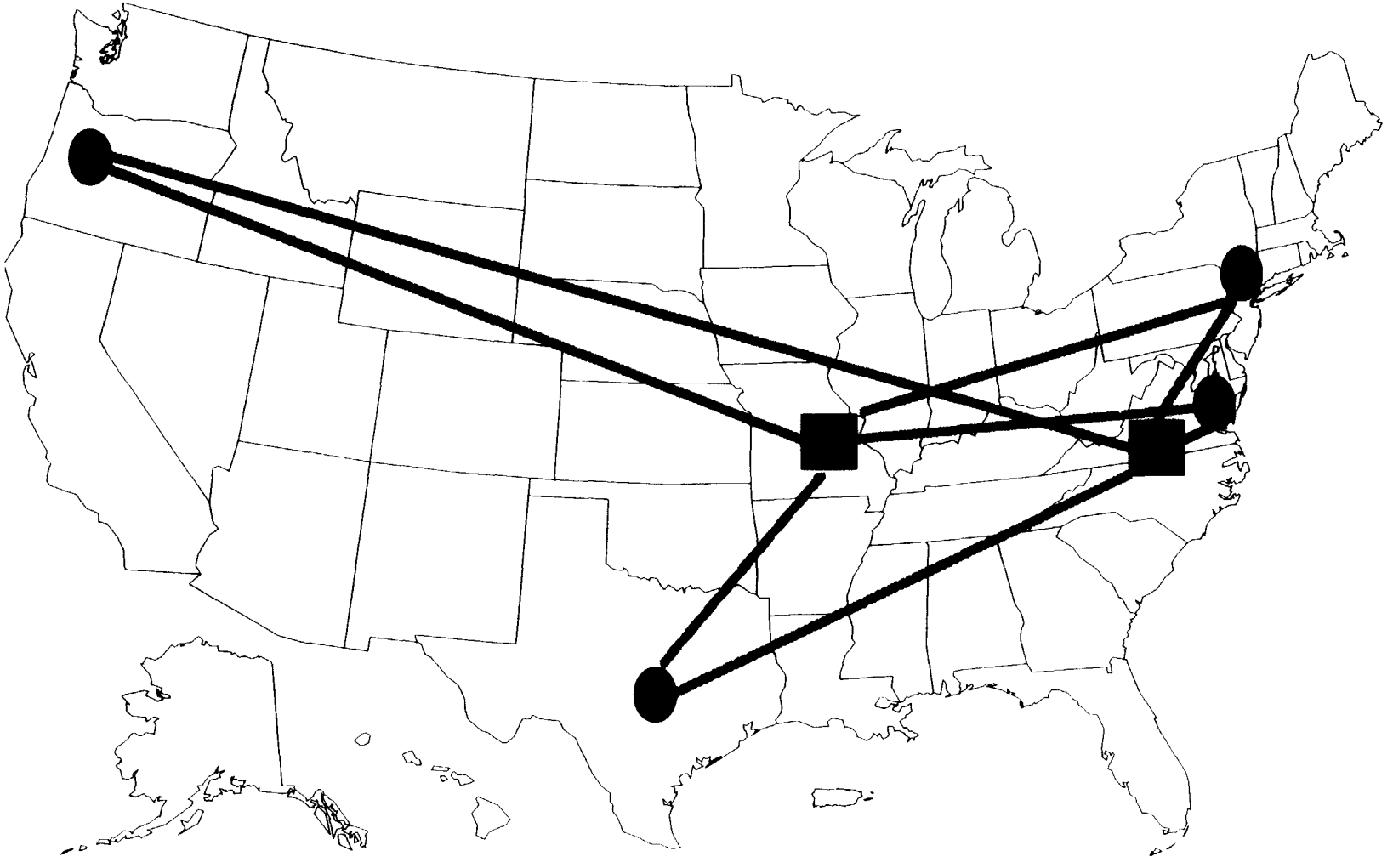
[1] Based on 1996 annual access filings of the RBOCs and GTE, and includes both usage and flat-rated elements.
[2] LS is the abbreviation for Local Switching; Other TS for Other Traffic Sensitive; and TIC for Transport Interconnection Charge.
[3] If the ESP and end user are not in the same local calling area, the ESP may purchase FX lines (at private line rates) to the end offices near its customers.
[4] Calculated from data presented in Comments of CompuServe and Prodigy in Docket 96-262, 1/29/97, pp. 10-11.
[5] Based on results from Hatfield model, version 3.1, for LECs with more than 100,000 lines.
[6] Represents a range based on relative use of tandem switching, from 20% (the average for IXCs) up to 50%.

ATTACHMENT 3

Diagram of AT&T WorldNet℠ Services Network

ILLUSTRATIVE DIAGRAM OF AT&T WORLDNET[sm] SERVICES DIAL-UP NETWORK



■ Data Center/Web Svrs ● Representative Dial-up POP

CERTIFICATE OF SERVICE

I, Thomas A. Blaser, do hereby certify that on this 24th day of March, 1997, I caused a copy of the foregoing Comments of AT&T Corp. to be served upon each of the parties listed on the attached Service List by U.S. first class mail, postage prepaid.

/s/ Thomas A. Blaser
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