

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554



In the Matter of:)
THE BELL ATLANTIC TELEPHONE COMPANIES)))
Offer of Comparably Efficient Inter- connection to Providers of Protocol Conversion Services))))

PLAN TO OFFER COMPARABLY EFFICIENT INTERCONNECTION

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The Bell Atlantic telephone companies hereby submit a comparably efficient interconnection ("CEI") plan for its proposed protocol conversion services. Bell Atlantic proposes to offer several types of protocol conversion in connection with three different categories of basic services — Public Data Network ("PDN") packet switched data service, central office-based local area network service ("CO LAN") and private line network services ("PLS"). All the underlying basic services for the three categories are currently available in all seven Bell Atlantic jurisdictions. 2/ As demonstrated in this plan, Bell Atlantic will comply fully with all of the Commission's CEI requirements. Bell Atlantic therefore respectfully requests the Commission to approve this plan without delay.

^{1.} The Bell Telephone Company of Pennsylvania, the four Chesapeake and Potomac Telephone Companies, The Diamond State Telephone Company and New Jersey Bell Telephone Company.

^{2.} PDN and some private line services are also tariffed at the federal level.

I. <u>INTRODUCTION</u> AND SUMMARY

The Commission has authorized Bell Atlantic to provide asynchronous to X.25 and X.75 protocol conversions in connection with its PDN service. In As diverse terminals continue to proliferate, however, customers have approached Bell Atlantic with requests to support several additional synchronous protocols. Support of these additional protocols will also broaden the potential market for PDN service. In

Customer needs for protocol conversion functions are not limited to packet switching, however. CO LAN customers have asked Bell Atlantic to provide protocol conversions in order that they may mix terminals from various manufacturers on their premises and connect them through CO LAN. A large basic PLS customer has also asked Bell Atlantic to provide protocol conversions to allow use of a variety of additional terminals and additional host computers within that customer's existing

^{3.} New Jersey Bell Telephone Company, ENF 84-22, Mimeo No. 1426, released December 13, 1985; The Bell Atlantic Telephone Companies, AAD 5-1296, released May 19, 1986 ("Bell Atlantic Protocol Orders").

^{4.} Some of these additional protocol conversions may be accomplished with software which is now available from the manufacturer of the packet assembler/disassembler ("PAD") equipment now in use, while others will require additional software development.

network, and Bell Atlantic anticipates similar requests from other customers.

All the underlying network services are now available at the same rates to end users and to competing providers of protocol conversion services, and they will remain available for any lawful purpose. Bell Atlantic will use these services, at the same rates, in providing protocol conversions within its network. Accordingly, Bell Atlantic, its competitors, and end users will all be treated identically in the availability of all underlying basic services. 5/

II. UNDERLYING BASIC NETWORK SERVICES

The protocol conversions listed below will be offered in connection with three different classes of basic network services.

^{5.} In the event the Commission believes that provision of protocol conversions with any one of the three categories of service requires additional study which will delay CEI Plan approval, Bell Atlantic respectfully requests approval of other portions of the Plan while that study is undertaken.

- A. Public Data Network Service: PDN is a common-user packet-switched digital data service which provides transmission and delivery of data from one access line on the local data network to another line on that network or on a connected data network. PDN may be used for interconnection of data communications devices and systems such as personal computers, business terminals and hosts, other data networks and information service providers. Access to PDN may be attained by dialing through the local exchange network or by direct (private line) access. The additional protocol conversions will be provided in the same manner as are asynchronous to X.25 and X.75 conversions which the Commission has previously approved.6/
- B. Central Office Local Area Network Service: CO LAN is a data service which permits communication at various speeds among personal computers, business terminals and hosts, and other data networks of a single customer which are located or which terminate within a single building or campus or interconnected series of buildings or campuses. Unlike a premises-based local area network, CO LAN performs the switching among the customer's terminals and networks at the telephone company central office. Central office switching eliminates the need for a customer to locate and maintain switching equipment

^{6.} See Bell Atlantic Protocol Orders.

on premises and provides the customer with the benefits of new features without additional capital investment or delay. 7/

The CO LAN architecture with protocol conversion is depicted in Figure 1. Communication from the CO LAN switch to the protocol converter / will be through tariffed voice-grade private lines. Whether or not protocol conversion is required, the communication between the central office and the customer's premises will be via digital data lines at speeds up to 1.544 Mbps secured at tariffed rates. 2/

C. <u>Private Line Service</u>: PLS provides the customer with private line analog or digital communications at a variety of bandwidths and transmission speeds. Provision of protocol conversion with PLS enables a customer to connect disparate

^{7.} CO LAN is offered under tariff in the District of Columbia, Maryland, Pennsylvania and Virginia. It is offered under special assembly in Delaware and New Jersey and is detariffed in West Virginia. CO LAN is marketed under the trade name LANgate.

^{8.} The protocol conversion capability may in the future be integrated as a separate line card within the CO LAN switch.

^{9.} CO LAN gives the customer the opportunity to obtain data over voice ("DOV") multiplexing. Since the customer will obtain the DOV capability at the same tariffed rate regardless of whether any required protocol conversion is obtained from Bell Atlantic or from a competitor, the Commission's requirement to provide DOV at nondiscriminatory terms and conditions is satisfied. See New York Telephone Company, AAD 5-1242, Mimeo No. 6782, released September 11, 1986, at ¶¶ 64-5.

business terminals within a single private line network. $\underline{10}$ /
Protocol conversions will take place within equipment located in Bell Atlantic central offices.

III. COMPARABLY EFFICIENT INTERCONNECTION

In this section, Bell Atlantic demonstrates the manner in which it will meet each CEI requirement the Commission has established in Computer Inquiry III. 11/

A. Description of Service 12/

Bell Atlantic requests authority to provide a variety of protocol conversions within its network. In addition to those protocols listed below, Bell Atlantic asks permission to provide additional conversions among synchronous communications

^{10.} If the customer's network includes locations in more than one LATA, Bell Atlantic will provide only the intraLATA services. The customer must obtain the interLATA segments from a non-Bell Atlantic source.

^{11.} Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry), Report and Order, 104 F.C.C.2d 958 (1986) ("R&O").

^{12. &}lt;u>Id</u>. at 1054-5.

protocols which may be available in the future and which may be provided in a manner similar to those listed below. 13/

- Asynchronous
- X.25 Packet Switching Protocol
- High Level Data Link Control
- X.75 Internetworking Packet Protocol
- X.400 Electronic Mail Protocol
- Binary Synchronous Protocol ("BSC")
 - o 3270 Display System Protocol BSC
 - o Binary Synchronous Interface BSC
 - o Multi-leaving Interface BSC
- System Network Architecture/Synchronous Data Link Control ("SNA/SDLC")
 - 0 3270 SNA
 - o QLLC X.25/SDLC
- 2780/3780 Houston Automatic Spooling Protocol/Remote Job Entry
- 2946 Synchronous
- Transmission Control Protocol/Internet Protocol
- Ethernet (e.g., IEEE 802.3)
- Token Ring (e.g., IEEE 802.5)
- Distributed Queue Dual Bus IEEE 802.6.
- Fiber Distributed Data Interface X3T9

^{13.} New protocols and variations are constantly being developed, and it would be impossible to anticipate all those which customers might request. Moreover, there is no regulatory policy advanced by requiring a new CEI plan each time a customer asks Bell Atlantic to support a new protocol.

- Burroughs Data Link Control
- Burroughs B-20
- DEC Digital Data Communications Message Protocol
- NCR TOWER 1632
- NCR MODUS
- NCR 9300
- Olivetti SP 624/644
- Sperry Universal Data Link Control
- Sperry Uniscope
- Tandem 6530

These protocols can be supported using either existing hardware and software or hardware and software which Bell Atlantic anticipates will soon be available. Each of the service categories may not use every listed protocol, since Bell Atlantic cannot now anticipate all customer protocol conversion needs. However, approval of this plan will allow Bell Atlantic to meet such needs quickly as they arise.

B. Interface Functionality14/

The basic services which Bell Atlantic will obtain to provide its protocol conversion service are listed in Appendix A, along with references to effective tariffs in all Bell

^{14.} R&O, 104 F.C.C.2d at 1039.

Atlantic jurisdictions. 15/ All the interfaces between these services and customers' premises or other service providers are standard, published interfaces associated with these services. No special signaling, abbreviated dialing, or unique capabilities will be provided to Bell Atlantic's protocol conversion service or to other vendors through these offerings.

C. <u>Unbundling of Basic Services 16</u>/

The basic services underlying Bell Atlantic's protocol conversion service are currently offered in all Bell Atlantic jurisdictions on an unbundled basis. No further unbundling is required to comply with CEI requirements.

D. Resale17/

Bell Atlantic will take all underlying basic services at full rates, add the protocol conversion enhancements, and provide the resulting enhanced service on an unregulated basis.

^{15.} Because of the volume of relevant tariffs, Bell Atlantic is providing the Commission staff with one set of the sample tariff pages.

^{16.} R&O, 104 F.C.C.2d at 1040.

^{17.} Id.

E. Technical Characteristics 18/

Bell Atlantic's protocol conversion service will order all underlying basic services from the same existing tariffs as its competitors. The nondiscriminatory circuit assignment and installation procedures described in Appendix B will ensure that all circuits meet the same preestablished technical standards for those services. These procedures have been reviewed and approved in connection with other Bell Atlantic CEI plans, subject to further review in connection with Bell Atlantic's Open Network Architecture Plan. 19/

F. Installation, Maintenance and Repair 20/

Bell Atlantic's installation, maintenance and repair procedures appear in Appendix B. These have also been approved in connection with Bell Atlantic's other CEI plans.

^{18. &}lt;u>Id</u>. at 1041.

^{19.} The Bell Atlantic Telephone Companies, Offer of Comparably Efficient Interconnection to Enhanced Service Providers (Message Storage Service), 3 FCC Rcd 1108 (1988) at ¶ 40; Further Order, 3 FCC Rcd 3552 (1988) at ¶ 12; The Bell Atlantic Telephone Companies, Offer of Comparably Efficient Interconnection to Providers of Voice Messaging Service, DA 88-1473, released September 30, 1988 at ¶ 52; The Bell Atlantic Telephone Companies, Offer of Comparably Efficient Interconnection to Providers of Gateway Services, DA 88-1512, released September 30, 1988 at ¶ 28.

^{20.} R&O, 104 F.C.C.2d at 1041, 1055-6.

G. End User Access 21/

Customer access to Bell Atlantic's protocol conversion service and to a competitor's service will be identical for each category of basic service.

H. CEI Availability22/

All underlying basic services are currently available in all Bell Atlantic jurisdictions.

I. Minimization of Transport Costs 23/

The Commission has held that this condition is satisfied where, as here, affiliated and unaffiliated enhanced service vendors are charged the same rate for all underlying basic services. 24/

^{21. &}lt;u>Id</u>. at 1041.

^{22.} Id.

^{23. &}lt;u>Id</u>. at 1042.

^{24.} Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry), Phase II Reconsideration Order, 3 FCC Rcd 1150 (1988) at $\P\P$ 32-4.

J. Recipients of CEI 25/

All of the underlying basic services which Bell Atlantic will use to provide its protocol conversion service are available to all users for any lawful purpose.

K. Allocation of Joint and Common Costs 26/

Joint and common costs will be allocated pursuant to Bell Atlantic's Cost Allocation Manual.

L. Sample Tariffs 27/

A list of effective state tariffs appears at Appendix A.

M. Nondiscrimination Reporting 28/

Bell Atlantic's procedures for nondiscrimination reporting appear in Appendix B. These procedures have been approved in connection with Bell Atlantic's other CEI plans, as noted above.

^{25.} R&O, 104 F.C.C.2d at 1042.

^{26. &}lt;u>Id</u>. at 1068, 1075-6.

^{27. &}lt;u>Id</u>. at 1055.

^{28. &}lt;u>Id</u>. at 1055-7.

^{29. &}lt;u>Id</u>. at 1068, 1089-92.

N. Customer Proprietary Network Information ("CPNI")29/

Bell Atlantic's proposed CPNI procedures, which were filed as an amendment to its ONA plan, appear in Appendix C. These procedures have now been implemented. All multiline business customers have been informed of their CPNI rights and the procedures for restricting the records of any customer requesting such a restriction have been carried out.

O. <u>Disclosure of Network Information30</u>/

No changes to existing network interface specifications are anticipated in connection with provision of Bell Atlantic's protocol conversion service.

^{30. &}lt;u>Id</u>. at 1068-9, 1080-6.

WHEREFORE, Bell Atlantic respectfully requests approval of this plan to provide comparably efficient interconnection and permission to begin the unseparated provision of protocol conversion services.

Respectfully submitted,

The Bell Atlantic Telephone Companies

By Their Attorneys

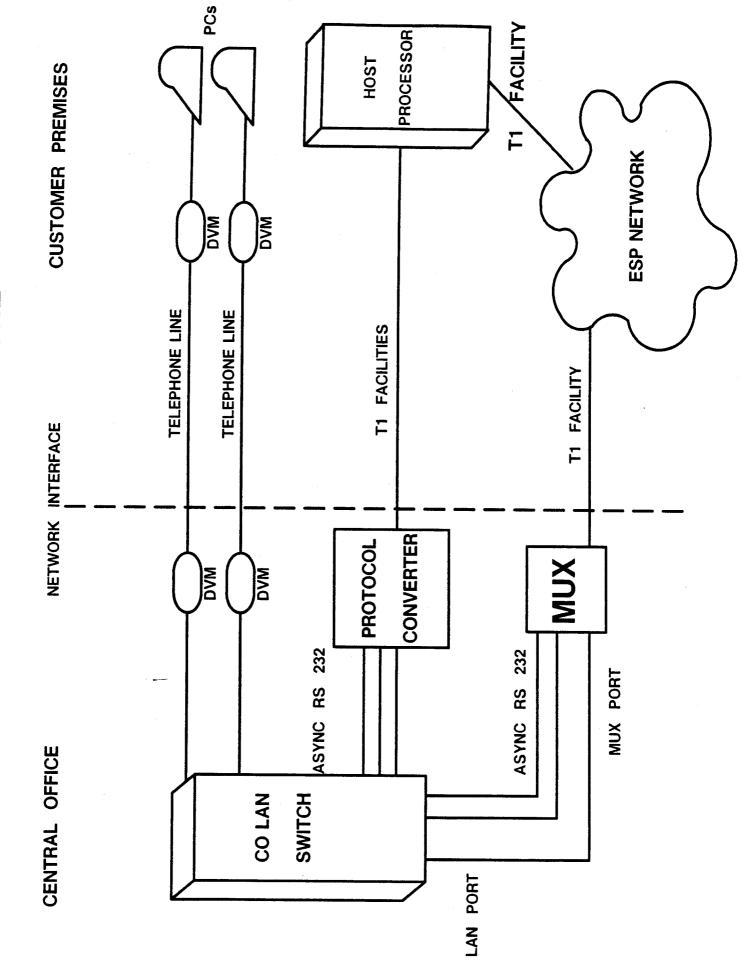
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CO LAN ARCHITECTURE



EXPLANATION - CO LAN ARCHITECTURE

Asynchronous communications from customer-premises personal computers ("PCs") are transmitted over local exchange telephone lines subscribed to by the end user to the central office CO LAN switch. Where the customer desires, Bell Atlantic provides data/voice multiplexing service as an optional feature of CO LAN. The premises data/voice multiplexer (DVM) is customer premises equipment. The voice signal is delivered to the local central office switch.

In the basic CO LAN service, the customer's data is transmitted from the CO LAN switch over digital access lines at speeds up 19.2 Kbps (labelled ASYNCH RS 232 on Figure 1) to a multiplexer (MUX). The multiplexed data travels through a 1.544 Mbps T1 facility to the customer's host processor.

Where a customer requests protocol conversion within the network, Bell Atlantic takes all the above elements of the basic CO LAN service at full rates and adds the requested protocol conversion. The protocol conversion capability may be incorporated into the CO LAN switch, but Bell Atlantic's enhanced service will still be charged for all basic CO LAN service elements. In addition, as shown on Figure 1, a competing ESP who provides protocol conversion service must use two Tl facilities. To assure equality of charges, Bell Atlantic's protocol conversion service will be charged for two Tl facilities as well.

Basic Services and Tariffs

	SERVICE			TARIFF	SECTION
I.	. PUBLIC DATA NETWORK (PDN)				
	C&P				
	West Virginia Virginia Maryland Washington	- - -	State	Not Available S.C.CVa. No. 217 P.S.CMd. No. 217 Available through interstate tariff	14 14
	Bell of PA	-	State	P.U.C. No. 302	13
	Diamond State	-	State	Available through interstate tariff	
	New Jersey Bell	-	State	B.P.UN.J. No. 2 B.P.UN.J. No. 2	A12 8
	Bell Atlantic	-	Interstate	F.C.C. No. 1	16
II.	C.O. LAN				
	C&P				
	Washington, D.C. Maryland Virginia West Virginia	- - -		P.S.CDC. No. 203 P.S.CMD. No. 203 S.C.CVA. No. 203 Detariffed	13L 13L 13L
	Bell of PA	-		P.AP.U.C. No. 1	20D
	Diamond State	-		ICB-Tariff pending	
	New Jersey Bell	-		ICB	

SERVICE	TARIFF	SECTION
III. PRIVATE LINE SERVICE		
C&P		
Washington		
Channel Services - State	P.S.CD.C. No. 204	
Maryland		
Channel Services - State	P.S.CMd. No.204	
Special Access - State <u>Virginia</u>	P.S.CMd. No. 217	7
Channel Services - State	S.C.CVa. No. 204	
Special Access - State	S.C.CVa. No. 217	7
West Virginia		
Channel Services - State	P.S.CW.Va. No. 204	
Special Access - State	P.S.CW.Va. No. 217	7
<u>Pennsylvania</u>		
Channel Service and Special Access (Merged) - State	PA. P.U.C. No. 304	1-7
<u>Delaware</u>		
Channel Services - State	P.S.CDel. No. 1	
New Jersey		
Channel Services - State	B.P.UN.J. No. 2	
Special Access - State	B.P.UN.J. No. 2	. 7
Bell Atlantic		
Special Access - Interstate	F.C.C. No. 1	7

Nondiscrimination

E. INSTALLATION AND MAINTENANCE

Bell Atlantic's installation and maintenance procedures preclude discrimination among Bell Atlantic's customers. Standard mechanized maintenance and installation systems and procedures vary by type of service and make no distinction based on the identity of the customer requesting service. In addition, the selection of facilities and assigned due dates are made without regard to customer identification. Bell Atlantic will utilize existing standard mechanized operating systems and procedures for the provisioning and maintenance of all basic services provided to affiliated and non-affiliated enhanced service providers. Moreover, all Bell Atlantic jurisdictions specify repair intervals, either in tariffs or regulations, and provide for refunds if these intervals are exceeded.

All personnel involved in installation and maintenance activities will receive specific training regarding the Commission's new nondiscrimination requirements. Training of newly assigned distribution and switched services personnel will be expanded to incorporate these regulations. Supervisors of existing employees will be required to conduct in-service training of their staff to assure they are fully apprised of their nondiscrimination responsibilities.

Supervisors are further required to review with their employees annually the corporate brochure entitled "A Personal Responsibility." This

brochure, which now contains general nondiscrimination provisions, will be revised in 1988 to include a specific discussion of the nondiscrimination requirements for installation and maintenance activity. Any violation of these standards will subject the employee to disciplinary action, up to and including dismissal. Supervisors will be instructed to monitor employee conduct and initiate any needed disciplinary action.

Bell Atlantic will file, on an annual basis, an affidavit signed by the officer responsible for installation procedures attesting that Bell Atlantic has followed the procedures described in this plan and that Bell Atlantic has not discriminated with respect to the quality of service it has provided to its own enhanced services and to competitors.

INSTALLATION PROCEDURES

Managerial mechanisms are in place to assure equality of installation work and to assure that the work meets Bell Atlantic's high standards. If a complaint is placed by a customer to either the business office, Centralized Operations Group (COG), or maintenance bureau, a supervisor is required to investigate the complaint. If a complaint is validated, and an employee is found to have intentionally provided inferior service that employee is subject to disciplinary action which can include suspension or dismissal.

Orders for basic services, including BSEs, offered in the local exchange tariff can be taken by a Business Service Center (BSC), Interexchange Carrier Service Center (ICSC), COG, network services Account Executive o

the Intermediary Marketing organization. All of these customer service organizations are authorized to receive orders from affiliated and unaffiliated ESPs.

when a customer calls to request service, the customer's name and address are entered into the Service Order Processor (SOP). When the SOP directs the service order for execution, the system designates the installation date. That installation date is established based upon the standard interval applicable to the type of service requested, unless the customer requests a longer interval, and is entered into the SOP for mechanized distribution to the appropriate provisioning systems and work groups. The standard due date intervals are assigned based only on the task, not the customer or the customer's planned use of the service. The mechanized systems assign facilities on a random basis, thus assuring that there can be no systematic difference in line quality.

The details of the provisioning procedures and the specific systems utilized vary slightly among the Bell Atlantic companies and between standard switched telephone service (POTS) and special services. By late 1989, however, all Bell Atlantic companies expect to be using comparable procedures and systems (those described below for New Jersey Bell and the CAP Companies).

The limited manual involvement in the processes outlined below consists of non-discretionary extraction of data from one record system and routinely keystroking it into the next such system. This is required du-

to the different vintages of the various systems and will be largely eliminated over time.

CSP Companies and New Jersey Bell: For standard switched telephone service, the SOP distributes the POTS service order document via the mechanized Bell Administrative Network Communications System (BANCS) in accordance with a Destination Address Code (DAC) placed on the service order. BANCS distributes the order to the various groups/disciplines to provide the service requested, using the DAC information. This initial distribution is transmitted to the Installation Control Center (ICC) and the Loop Assignment Center (LAC) responsible for providing service in the requested area. The LAC then assigns the local cable facilities and/or the central office equipment using mechanized systems. The local cable assignment, including outside plant information, is distributed via the mechanized BANCS System. This distribution is transmitted to the ICC for installation. The wiring information and order number is obtained from the mechanized Computer System for Maintenance Operations and is used to instruct the central office to meet the customer's due date. Installation personnel scheduling is done mechanically based upon promised due date and current volume of installation orders.

For special service orders, BANCs distributes the service order to the Special Services Center and to the Circuit Provisioning Center if additional circuits are required. The Enhanced Mechanized Assignment Record Conversion System and Facility Assignment and Control System assign facilities for special circuit design. This process could require interfacing with the Distribution Services Engineering or Design Center

for the local loop makeup of special transmission requirements pertaining to the type of circuit requested by the customer.

2. Bell of Pennsylvania and Diamond State: For a POTS order, the SOP uses routing codes which are typed on a service order for distribution. This routing directs the order to the Customer Services Bureau (CSB). The CSI mechanically assigns the local cable facility and central office equipment for those orders requiring assignment. The Dedicated Plant Assignment Card, containing the customer address and wiring limits, and the Exchange Customer Cable Record, are used to assign cable facilities. The service order, with the assignment written in, is distributed by the CSB to the work groups and/or centers required to provide the service to the customer by the date requested.

For a special service order, the CSB enters the assignment into the Completion and Assignment for Special Services system. The Distribution Services Engineering Center then adds the Local Loop Make Up to the assignments and forwards it to the Circuit Provisioning Center (CPC) for design. The CPC inputs it into the mechanized Trunk Integrated Record Keeping System (TIRKS).

3. All Bell Atlantic Telephone Companies: The ICC is responsible for installing POTS circuits and dispatching a service technician, as required, to complete Bell Atlantic's installation activity. The ICC is also responsible for performing pre-service and turn-up testing on the circuit(s) to ensure the facilities meet network transmission performance standards.

If switched features are required on either the initial circuit installation order or subsequent service requests, the order is also transmitted to the Recent Change Memory Administration Center, which makes the necessary provisioning changes in the electronic switching system.

All completed orders for local exchange services are forwarded via the SOP to the Customer Record Information System for billing.

2. MAINTENANCE AND REPAIR

Bell Atlantic will submit all trouble reports for network services associated with its enhanced service operations through the same repair bureau interface groups utilized for all other customer reports, including those received from competing ESPs, to assure nondiscriminatic in the maintenance and repair processes.

Maintenance intervals are pre-determined and are updated at least on a daily basis, based upon force availability and outstanding maintenance requests. When a customer calls the Centralized Repair Service Attendan Bureau (CRSAB) or Customer Service Bureau (CSB - in Bell of Pa.) with a maintenance request, the customer is given an estimate of the expected time needed to complete the repair work based upon the current interval for the type of trouble reported.

The maintenance process related to POTS-type service begins when a repair service attendant in the CRSAB receives and logs the trouble report.

During the initial contact with the customer, the repair attendant reviews the customer's record in the Loop Maintenance Operations System (LMOS).

LMCS electronically transmits trouble reports to the Maintenance Center (MC). The MC performs analysis and testing of the reported conditions utilizing the Mechanized Loop Test System (MLT). If the trouble report cannot be cleared at this point, the MC determines via MLT testing if the trouble report should be dispatched "out" to a technician or "in" to the central office for clearance.

The LMOS customer "trouble history" is updated when the trouble report is closed. This update includes revised information regarding the customer circuit along with details on the nature of the trouble and total time to clear the report.

Either the CRSAB or a Special Services Center (SSC) initially receives trouble reports associated with designed or Special Services circuits, depending on the local operating company guidelines. Trouble reports received by the CRSAB attendant are processed using LMOS and the resulting trouble ticket is forwarded to the SSC for handling. If the SSC takes the repair report directly from the customer, the SSC enters the repair data directly into the mechanized Circuit Installation and Maintenance System (CIMAP). The SSC uses CIMAP for the overall coordination and tracking of installation and maintenance activity on special service circuits.

The SSC analyzes the trouble report and, if appropriate, electronically tests the facilities using the Switched Access Remote Test System. The Special Services Dispatch Administration Center resolves any trouble report associated with the local facilities. Repairs related to either subscriber cable or switching equipment are referred to the same Cable Maintenance Center or RCMAC that handle POTS trouble reports.

In the case of routine Special Services trouble reports, the repair foreman attempts to match work force and volume of trouble reports in estimating repair times. Generally, the work is performed on a "first come, first served" basis. However, occasionally adjustments have to be made to this process if the work requires special skills or if emergencies develop.

Special services customers who are dissatisfied with either the repair time estimates or the work itself may call the SSC, which is open 24 hours per day and is attended by a technician with a supervisor on call.

3. HONDISCRIMINATION REPORTING REQUIREMENTS

Bell Atlantic will file quarterly tracking reports with the Commission that will demonstrate nondiscrimination in the installation and maintenance of basic services associated with affiliated enhanced service providers. These reports will compare the percentage of installation orders met, and the average maintenance intervals, provided to Bell Atlantic's enhanced service operation with those provided to a representative sample of all customers. Installation reports will be

provided for three categories of analog service (exchange service, private line, other - primarily WATS/800) and three categories of digital service (subrate, 56 Kbps, high-capacity). The format for these reports appears below.

Bell Atlantic Quarterly Tracking Report

Report Pe	riod	
-----------	------	--

Affiliated ESP

All Customers

Installation Orders

% met

% met

Digital Services

- Subrate (9.6 Kbps.

& below)

- 56 Kbps.
- High Capacity

Analog Services

- Exchange
- Private Line
- -_All Others (primarily HATS/800)

Maintenance Reports

avg. duration

avg. duration

Customer Proprietary Network Information

7. CUSTOMER PROPRIETARY NETWORK INFORMATION (CPNI)

INDIVIDUAL CPNI

CPNI consists of customer service records ("CSRs") and billing records. CSRs provide the customer's name, service location, billing address, talephone number(s) and billing telephone number; and a description of all the customer's network services and capacity and the monthly charges for those services. The billing record which is part of CPNI is the customer's actual telephone bill. The CPNI for a particular customer reflects all services which are ordered by, or on behalf of, that customer, whether that customer is an end user or a service provider. The CPNI of an end user would not, however, contain information concerning the enhanced services that customer may have secured.

Bell Atlantic notify all multiline business customers on an annual basis of their CPNI rights. The first such notification will be provided within 60 days of approval of this plan. The notice will inform customers of their right to request in writing that Bell Atlantic perform any of the following:

- (1) disclose CPNI to any ESP that requests this information;
- (2) provide CPNI upon request to the following ESP(s):_____
- (3) withhold CPNI from all Bell Atlantic personnel engaged in marketing either enhanced services:
- (4) restrict records for the following purposes or for a specified limited time period:______.

Bell Atlantic will enclose in its notice a response form and pre-addressed envelope for the customer's convenience. A copy of the sample notification letter and reponse form are attached.

Any Bell Atlantic customer has the right to exercise these CPNI options at any time and need not await the company's annual notification of these rights. In addition, Bell Atlantic will honor requests from single line cusiness and residence customers, who need not receive notification, to restrict or disclose their CPNI. Once a customer provides Bell Atlantic with written notification concerning treatment of CPNI, Bell Atlantic will honor that request until advised by the customer in writing of a desire to change the status of the CPNI treatment. Before Bell Atlantic's enhanced services personnel may be permitted to access a multiline business customers' CPNI, however, such customer will first receive an initial period of 30 days after notice of the CPNI rights to exercise those rights, unless a customer has authorized such access in writing. The notification letter will advise customers of this 30 day period.

Bell Atlantic will release a customer's CPNI on the same terms and conditions to Bell Atlantic's own enhanced services operations and to unaffiliated vendors. Should Bell Atlantic decide that circumstances justify charging vendors a fee to recover the administrative costs incurred in providing this information, such a charge would apply equally to Bell Atlantic's own enhanced services operations. Currently, Bell Atlantic plans to impose no such charges.

A centralized group will receive customer requests for disclosure of CPNI to specific ESPs and will release the information through established channels. Where a customer has requested CPNI to be restricted from Bell Atlantic personnel, network services personnel will affix security indicators on specific customer account records. Personnel in all network services sales organizations will receive training on the sensitivity of CPNI, notification procedures, methods employed to mark records, and procedures to follow when customers request limitations on the use of their CPNI. The training of newly hired sales representatives will include CPNI procedures.

Employees will receive the following instructions which are identical to those which the Commission has approved for CPE structural relief:

- the FCC ruling granting enhanced services structural relief included as a safeguard that customers have the ability to limit access to their CPNI:
- employees have an obligation to restrict access by network services or affiliate sales personnel to the CPNI of the customer who has requested such a restriction;
- customers may request, or remove, restricted access to CPNI in writing at any time. Bell Atlantic will provide written notification on an annual basis advising multiline business customers of their rights;
- if a customer selects the option of restricting the use of CPNI, then that customer's account records must be appropriately marked and identified:

- Bell Atlantic employees with access to customer account information may not represent, promote or sell enhanced services to any customers who choose to restrict the use of their CPNI:
- failure to carry out all Bell Atlantic CPNI practices and procedures can lead to disciplinary action, up to and including dismissal.

All employees must review annually the guidelines regarding the company's position on ensuring the protection of proprietary information in the corporate brochure entitled "A Personal Responsibility." Employees are not only required to review this information, but are also required to attest to their review and understanding of this information either by signing a statement which is placed in their respective personnel file or by having their supervisors sign a statement that they have reviewed the restrictions with their employees.

2. AGGREGATE CPNI

Bell Atlantic will make aggregated CPNI available to affiliated and unaffiliated ESPs under the same terms and conditions. A list of the aggregated CPNI that is provided to Bell Atlantic's enhanced services personnel will be published semi-annually and distributed to unaffiliated ESPs on request.

(COMPANY LETTERHEAD)

Dear Customer,

As a result of recent Federal Communications Commission (FCC) and court rulings, (Company Name) is pleased to announce that it will soon be able to offer several exciting new enhanced voice and data services. You will hear more about these services in the coming months.

Under the FCC's regulations, you may prevent (Company Name) sales personnel from looking at your service and billing records when they are marketing these enhanced services by the checking the appropriate box on the enclosed letter, signing the letter and returning it in the envelope provided. If you want your records restricted, please return the letter within 30 days of the date of this letter. If you want this restriction to apply to only certain enhanced services or to be in effect for a limited time, please write your instructions in the space provided on the attached letter. If you want (Company Name) enhanced services personnel to be able to look at your records, no action is required.

You may also authorize (Company Name) to release your service records on request to any non-(Company Name) enhanced service providers or to any specific service provider that you list on the attached reply letter. If you want those providers to receive copies of your actual telephone bills as well, we will send them when the provider requests them if you have checked the appropriate box on the reply letter.

If you have more than one telephone account with (Company Name) or additional accounts within the Bell Atlantic region, you may receive more than one notification and response letter. If you wish to restrict each of the accounts or to release your complete records, please return each of the response letters you receive to assure that our information is complete.

If you have already asked (Company Name) to withhold or release your records to enhanced service providers, you need not take any additional action. We will honor your earlier request until you change it.

If you have any questions, please check the appropriate box on the attached response letter, and we will contact you. If you prefer, you may call your (Company Name) Business Office or your Marketing Account Team. The telephone number of your local Business Office is on your telephone bill or in the front of your (Company Name) White Pages directory.

(COMPANY NAME)

CUSTOMER PROPRIETARY NETWORK INFORMATION

	I AUTHORIZE YOU TO RELEASE MY SERVICE RECORD TO ALL ENHANCED SERVICE PROVIDERS UPON REQUE	S ST
	I AUTHORIZE YOU TO RELEASE MY SERVICE RECORD TO THE FOLLOWING ENHANCED SERVICE PROVIDERS: indicate name and telephone number):	
	You may add to this list at a later datby writing to the address at the bottom of the	ite is letter.
	RELEASE MY TELEPHONE BILL ON REQUEST	
	I WANT TO RESTRICT (COMPANY NAME) ENHANCED S PERSONNEL FROM ACCESS TO MY SERVICE AND BILI	SERVICES SALI LING RECORDS
26	f you want (Company Name) to restrict access to arvices or for a limited time, please write you astructions in the space below:	certain or specific
	TELEPHONE NUMBER: ()	
	PRINT NAME:	
•	SIGNATURE:	
	I WISH TO BE CALLED, I HAVE ADDITIONAL QUEST	ions.
In ma	the event the return envelope is misplaced, siled to:	this card ma