## Where Internet Service Providers and Telephone Companies Compete: A Guide to the Computer Inquiries, Enhanced Service Providers and Information Service Providers

### Robert Cannon\*

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FCC rules, regulations and orders so that the public will know where to look for more in depth information. It is the author's intent to stay as true to the original language and requirements of the Commission orders as possible. Therefore, at times and where appropriate, language taken directly from Commission orders is presented without further modification. The views expressed in this Guide are the authors alone. They do not necessarily represent those of the Commission, any FCC Commissioner or staff.

<sup>\*</sup> Senior Counsel, Office of Plans and Policy, Federal Communications Commission. This document is a guide only; nothing in this Guide modifies Commission rules and regulations. Where it diverges from FCC rules or regulations, those rules and regulations are authoritative. In addition, given the breadth of the regulatory history on this subject, this Guide could not possibly be exhaustive, covering every issue relevant to enhanced service providers. It is intended that this provide the public with sufficient information to comprehend the topic and also provide clear references to

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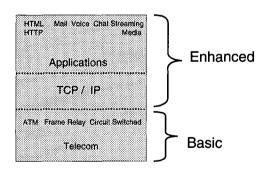
### I. EXECUTIVE SUMMARY

The Federal Communications Commission's ("FCC" or the "Commission") policy concerning competition between Internet Service Providers ("ISPs") and telephone companies entering the ISP market is well established. Going back to 1966, the Commission initiated the Computer Inquiries, which created safeguard rules that permit Bell Operating Companies ("BOCs") to enter the enhanced services market with certain restrictions and requirements that are designed to prevent cross subsidization, discrimination and anti-competitive behavior. Some of these rules have been codified in the Code of Federal Regulation; others have not. Some rules have been reconsidered by the Commission, appealed in federal court and reviewed by the Supreme Court. Some rules are currently in effect, some have been vacated and some are the subject of current open proceedings before the Commission. In light of the importance and complexity of this body of regulation, this Guide was created in order to present a concise review of the rules as they exist today.

In Computer I and II, the Commission distinguished between computers that facilitate communications (i.e., a computer in a network operation center used to monitor network reliability) and computers with which users interact. In order to distinguish between these two, the Commission created the categories of basic telecommunications services and enhanced services. Basic telecommunications services are the offering of pure

transmission capacity where the user's information is transmitted transparently across the network. Enhanced service is something more. Enhanced services are those services where usersupplied information interacts with the services on the network; and there is some degree of computer processing and modification of the user's information, or the creation of new information in response to user commands. Internet services fall within the definition of enhanced services.

### BASIC V. ENHANCED SERVICES

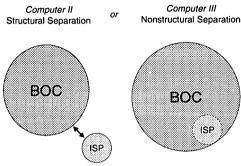


Basic telecommunications services fall under Title II of the Communications Act of 1934 as amended by the Telecommunications Act of 1996 (the "Communications Act") and are subject to common carrier regulations and obligations. Enhanced services are not regulated under Title II; rather, they are effectively "unregulated" by the Commission.

While the Commission does not regulate enhanced services, it does regulate the ability of BOCs to cross the boundary between BOCs and

ISPs. There are currently two regimes that a BOC can follow in order to enter the ISP market: Computer II structural separation or Computer III nonstructural separation. Both of these regimes are designed to ensure that the playing field is level and that nonaffiliated ISPs are in the same position to acquire telecommunications services as BOC-affiliated ISPs. A BOC can elect to proceed under either regime.

### **BOC ENTRY INTO ISP MARKET**



Under *Computer II*, in order to enter the ISP market, the BOC must set up a fully separate corporate subsidiary to act as the ISP. The affiliated ISP will acquire all services from the BOC on the same tariff terms as nonaffiliated ISPs. The BOC cannot promote the services of the ISP. The separate subsidiary must be fully independent, and all deals between the BOC and the ISP must be reduced to writing.

Under Computer III, the Commission determined that it could achieve the goals of preventing anti-competitive behavior without requiring the obligation of a separate subsidiary. In order to permit BOCs to offer enhanced services on an integrated basis, the Commission required BOCs to create Comparatively Efficient Interconnection ("CEI") Plans, and to file and have approved Open Network Architecture ("ONA") Plans.

CEI plans are required when a BOC actually desires to enter the enhanced services market. To do so, the BOC must create a CEI plan and post it on its website indicating how the BOC will ensure that a level playing field is maintained. In this CEI plan, the BOC must discuss nine parameters: interface functionality; unbundling of basic services; resale; technical characteristics; installation, maintenance and repair; end user access; CEI availability; minimization of transport costs; and availability to all interested customers or Enhanced Service Providers ("ESPs").

BOCs and GTE also were required to file and have approved ONA plans, regardless of whether they were going to enter the enhanced services market. ONA plans broke the BOCs' networks into basic elements known as Basic Service Elements, Basic Servicing Arrangements, Complimentary Network Services and Ancillary Network Services. These basic elements were designed to be the building blocks necessary for ESPs to offer their services. Once identified, BOCs would be required to offer these elements on a tarrifed basis. Accommodation was incorporated into the rules to permit ISPs to request new basic services as the network evolved.

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The Ninth Circuit Court of Appeals vacated the ONA rules. In response, the Commission issued an interim order indicating that the BOCs are bound by their approved ONA plans and, if the BOCs seek to enter the ESP market, they must post a CEI plan. The Commission also released a Further Notice of Proposed Rulemaking in order to respond to the concerns of the Ninth Circuit.

In addition, the Commission issued rules that apply to carriers at all times. These rules cover bundling, customer proprietary network information, network information disclosure, discrimination and accounting.

All carriers are prohibited from bundling Customer Premises Equipment ("CPE") and telecommunications services together as a packaged offering. Note that this restriction applies to the carriers and not necessarily to separate subsidiaries. In addition, all carriers that provide enhanced services and own their own facilities must unbundle the enhanced from the basic service, and offer the basic service "under the same tariffed terms and conditions under which they provide such services to their own enhanced service operations."

All carriers are subject to the customer proprietary network information rules. A carrier cannot use proprietary information, gathered through the provision of telecommunications services, in order to market nontelecommunications products. Proprietary information is something more than a list of information found in the phone book; it might consist of the type of services a user is acquiring. Thus, a carrier could not use the fact that a specific individual is subscribing to xDSL services in order to market Internet services to that individual (using the knowledge that the ma-

jority of xDSL subscribers use the service for Internet access).

Incumbent carriers must provide network information disclosure. These incumbent carriers must provide notice regarding any network changes that affect a competing service provider's (including an information service provider's) performance or ability to provide service, or will affect the incumbent local exchange carrier's ("ILEC's") interoperability with other service providers. For example, where the ILEC prepares a local loop and central office for xDSL service, the ILEC must provide notice of this change.

The BOCs and GTE also are required to establish procedures to ensure that they do not discriminate in their provision of ONA services—including the installation, maintenance and quality of such services—to unaffiliated ISPs and their customers. In order to ensure that the BOCs and GTE maintain nondiscriminatory practices, they are required to file regular reports with the Commission.

Finally, carriers are subject to certain accounting and cross-subsidization rules. A carrier cannot use financial resources from the regulated side of its business to cross-subsidize its nonregulated side. In other words, a carrier cannot use money raised from its telephone services side to subsidize Internet services. Carriers are subject to independent audits and must file regular reports with the Commission. The carrier's accounting information can be found in the Commission's ARMIS database.

ISPs can seek redress of violations of Commission rules in federal district court, at the Commission or before the state public utility commission. ISPs can file formal complaints with the Enforcement Bureau, litigate their claims and seek mone-

tary damages. In the alternative, ISPs can simply approach the Enforcement Bureau's Investigation Division with concerns about rule violations. The Investigation Division, in its discretion and where it has been approached with a specific and substantiated claim, can elect to initiate an investigation. Where violations are found, the Investigations Division can impose substantial fines.

	<b>Facilities Carriers</b>	BOCs: Computer II	BOCs: Computer III
Unhundle transport	X	X	X
from enhanced services			
Unbundle CPE	X	X	X
Separate Subsidiary		X	
CEI Plan			X
ONA Plan			X
ONA Discrimination			
Report			X
Network Information	X	X	X
Disclosure			
Accounting and Cross-	X	X	X
Subsidization Rules			
Customer Proprietary	X	X	X
Network Information			

### II. INTRODUCTION

ISPs<sup>1</sup> are both consumers of and competitors with telephone companies. The ISP market is competitive, having approximately 7,100 ISPs in North America.<sup>2</sup> Most Americans have a choice of seven or more ISPs.<sup>3</sup> The telephone market, as the result of the Telecommunications Act of 1996<sup>4</sup> (the "1996 Act"), is experiencing transformation, moving from a market dominated by monopolies to a market with new entrants bringing new services, new choices and new prices to consumers. Nevertheless, in many markets, the telephone companies retain strong market power in their regulated telephone service market that they could use to an unfair advantage in the nonregulated, competitive and innovative Internet services market.

<sup>1</sup> An ISP is an entity that provides its customers the ability to obtain online information through the Internet. ISPs purchase analog and digital lines from local exchange carriers to connect to their dial-in subscribers. Under one typical arrangement, an ISP customer dials a seven-digit number to reach the ISP server in the same local calling area. The ISP, in turn, combines "computer processing, information storage, protocol conversion, and routing with transmission to enable users to access Internet content and services." Under this arrangement, the end user generally pays the LEC a flat monthly fee for use of the local exchange network and generally pays the ISP a flat monthly fee for Internet access. The ISP typically purchases business lines from a LEC, for which it pays a flat monthly fee that allows unlimited incoming calls. In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Inter-Carrier Compen-

sation for ISP-Bound Traffic, Notice of Proposed Rulemaking, 14 FCC Rcd. 3689, 3691, para. 4 (1999) [hereinafter Inter-Carrier Compensation Order 1999].

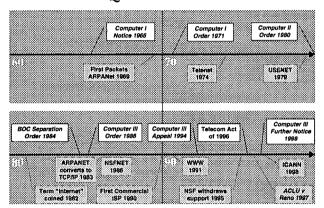
<sup>&</sup>lt;sup>2</sup> Bill McCarthy, *Introduction to the Directory of Internet Service Providers*, 12th Ed., BOARDWATCH MAGAZINE, at http://www.ispworld.com/isp/Introduction.htm (last visited Jan. 14, 2001) (noting that the directory contains 7,463 ISPs in North America).

<sup>&</sup>lt;sup>3</sup> Shane Greenstein, Distribution of ISPs, at http://www.nwu.edu/faculty/greenstein/images/research.html (May 1998); Tom Downes and Shane Greenstein, Universal Access and Local Commercial Internet Markets, 38, at http://www.nwu.edu/faculty/greenstein/images/research.html (June 8, 1998).

<sup>&</sup>lt;sup>4</sup> Pub. L. 104-104, 110 Stat. 56 (codified in scattered sections of 47 U.S.C. §§ 151–710).

The FCC has historically been concerned with the playing field where ISPs and telephone companies compete. In 1966, before the first packet was transmitted on the ARPANET and before the Internet<sup>5</sup> itself,<sup>6</sup> the FCC was curious about the difference between computers that facilitate communications and computers with which people communicate. The Commission pondered the regulatory implications of this distinction and whether both of these types of computers should be regulated as basic phone service. In order to answer these questions, the Commission launched the first Computer Inquiry.<sup>7</sup>

### COMPUTER INQUIRY TIMELINE



The Computer Inquiries have now been active for over thirty years. They have involved several proceedings before the Commission, appeals to federal courts, remands and a trip to the Supreme Court. They have occurred during the Information Revolution and the passage of the 1996 Act. Some of the rules have been codified into the Code of Federal Regulations; some have not. Some rules are in effect, some have been vacated

<sup>5</sup> See Federal Networking Council, FNC Resolution: Definition of "Internet," at http://www.fnc.gov/Internet\_res.html (Oct. 24, 1995); see also 47 U.S.C. § 231(e)(3) (Supp. IV 1999).

and some are the subject of current regulatory proceedings.

The complexity of this proceeding presents a challenge for comprehending the current land-scape. This Guide seeks to present one consolidated statement of the current rules for ESPs. This Guide does not seek to review the history of the Computer Inquiries<sup>8</sup> or address Competitive Local Exchange Carrier ("CLEC") concerns (even though CLECs and ISPs have been working closely together). Nor does this Guide cover all of the regulations governing the telecommunications carriers' behavior that may affect ISPs.<sup>9</sup> The focus of this document is the current rules that have arisen from the Computer Inquiries.

### III. THE COMPUTER INQUIRIES

The Computer I Inquiry<sup>10</sup> reviewed a new and growing area of communications, where people interacted with computers, and the computers processed the commands and spit back new information. The Commission saw this competitive market as distinct from telephone service.

The Commission also was concerned with telephone monopolies entering this new competitive market.<sup>11</sup> Thus, one of the goals of the Computer Inquiry proceedings was to create a level playing field where telephone companies using their economic might could not unfairly enter the ESP market, and destroy its competitive and innovative nature. The proceedings devised a set of rules to protect against improper cost allocation and discrimination by BOCs.<sup>12</sup>

The Computer Inquiries have resulted in two

<sup>&</sup>lt;sup>6</sup> See Barry M. Leiner, et al., A Brief History of the Internet, at http://www.isoc.org/internet/history/brief.html (last modified Aug. 4, 2000); see also Robert Hobbes' Zakon, Hobbes Internet Timeline v5.2, at http://www.isoc.org/guest/zakon/Internet/History/HIT.html (last visited Jan. 14, 2001); PBS, LIFE ON THE INTERNET, TIMELINE, at http://www.pbs.org/internet/timeline/index.html (last visited Oct. 12, 2000).

<sup>&</sup>lt;sup>7</sup> In re Regulatory & Policy Problems Presented by the Interdependence of Computer and Communication Services & Facilities, Notice of Inquiry, 7 F.C.C.2d 11, 17–18, para. 25 (1966).

<sup>8</sup> Many fine papers before this Guide have presented such reviews. See, e.g., FCC, OPP WORKING PAPER 31, THE FCC AND THE UNREGULATION OF THE INTERNET (authored by Jason Oxman) (1999), available at http://www.fcc.gov/opp/work-

ingp.html; see also Barbara Esbin, Internet Over Cable: Defining the Future In Terms of the Past, 7 CommLaw Conspectus 37 (1999); FCC, OPP Working Paper 29, Digital Tornado: The Internet and Telecommunications Policy (authored by Kevin Werbach) (1997), available at http://www.fcc.gov/opp/workingp.html.

<sup>&</sup>lt;sup>9</sup> For example, a number of the merger proceedings have addressed Internet-related concerns.

<sup>10</sup> In re Regulatory and Policy Problems Presented by the Interdependence of Computer and Communications Services and Facilities, Notice of Inquiry, 7 F.C.C.2d 11 (1966).

<sup>11</sup> See, e.g., In re Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities, Final Decision and Order, 28 F.C.C.2d 267, 268, para. 9 (1971) [hereinafter Computer I].

<sup>12</sup> In re Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services, Report and Order, 14 FCC Rcd. 4289, 4293–94, para. 7 (1999) [hereinafter Computer III Order 1999].

current regulatory schemes: Computer II<sup>13</sup> (structural separation) and Computer III<sup>14</sup> (nonstructural separation). Note that Computer III supplemented but did not replace Computer II. A telephone company falling under these rules can elect to proceed under either regime. <sup>15</sup> A BOC must comply with one set of rules; if the BOC has not satisfied the requirements of Computer III or Computer III, the BOC is not authorized to provide enhanced services.

In order to determine which regulations apply to the behavior of the BOCs, one must determine whether the BOC's ESP has successfully complied with *Computer II* or *Computer III*.

### A. Enhanced Service Providers

The first issue for the Commission was to distinguish between computers that facilitate the transmission of communications and computers with which people interact. This exploration resulted in the "enhanced service" and "basic service" distinction.

Basic telecommunications service is defined as "the offering of a pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer supplied information." Enhanced service, essen-

tially, is defined as everything else. ISPs fall under this latter category. In order to devise a bright line test, the Commission determined that where a service is offered with any level of enhancement, it is generally considered an enhanced service.

For the purpose of this subpart, the term 'enhanced service' shall refer to services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information.<sup>17</sup>

Examples of enhanced services include Internet access service, <sup>18</sup> online service, computer bulletin boards, video dialtone, <sup>19</sup> voice mail, <sup>20</sup> electronic publishing and others. <sup>21</sup> The mere fact that a network is packet-switched does not necessarily mean that it is an enhanced service. <sup>22</sup>

The distinction implies that basic telecommunications service is regulated as common carriage under Title II of the Communications Act; enhanced services are not regulated under Title II.<sup>23</sup> The 1996 Act defined "Information Service" as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information via telecommunications, and includes electronic pub-

<sup>13</sup> In re Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), Final Decision, 77 F.C.C.2d 384 (1980), reconsidered, Memorandum Opinion and Order, 84 F.C.C.2d 50 (1980), further reconsidered, Memorandum Opinion and Order on Further Reconsideration, 88 F.C.C.2d 512 (1981), aff'd, Computer and Communications Indus. Ass'n. v. FCC, 693 F.2d 198 (D.C. Cir. 1982), cert. denied, 461 U.S. 938 (1983) [hereinafter Computer II].

<sup>14</sup> In re Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry) and Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Thereof, Communications Protocols under Section 64.702 of the Commission's Rules and Regulations, Report and Order, 104 F.C.C.2d 958 (1986), modified on reconsideration, Report and Order, 2 FCC Rcd. 3035 (1987), further reconsidered, Memorandum Opinion and Order on Further Reconsideration, 3 FCC Rcd. 1135 (1988), second further reconsideration, Memorandum Opinion and Order on Further Reconsideration and Second Further Reconsideration, 4 FCC Rcd. 5927 (1989) [hereinafter Computer III]; see also Phase II, Report and Order, 2 FCC Rcd. 3072 (1987), further reconsidered, 4 FCC Rcd. 5927 (1989), rev'd in part, see also California v. FCC, 905 F.2d 1217 (9th Cir. 1990), on remand, Report and Order, 6 FCC Rcd. 7571 (1991), vacated in part and remanded, California v. FCC, 39 F.3d 919 (9th Cir. 1994); see also Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services, Notice of Proposed Rulemaking, 10 FCC Rcd. 8360 (1995).

<sup>15</sup> See Computer III Order 1999, 14 FCC Rcd. at 4308–09, para. 29.

Computer and Communications Indus. Ass'n v. FCC,
 F.2d 198, 204 (D.C. Cir. 1982); see also 47 U.S.C.
 § 153(43) (Supp. IV 1999).

<sup>&</sup>lt;sup>17</sup> 47 C.F.R. § 64.702(a) (1999).

<sup>&</sup>lt;sup>18</sup> See, e.g., In re Bell Atlantic Telephone Companies, Offer of Comparably Efficient Interconnection to Providers of Internet Access Services, Order, 11 FCC Rcd. 6919, para. 1 (1996).

<sup>&</sup>lt;sup>19</sup> See, e.g., In re Bell Atlantic Telephone Companies, Offer of Comparably Efficient Interconnection to Providers of Video Dialtone-Related Enhanced Services, Order, 11 FCC Rcd. 985, para. 1 (1995) [hereinafter Bell Atlantic's CEI Plan].

<sup>&</sup>lt;sup>20</sup> See, e.g., In re Southwestern Bell CEI Plan for the Provision of Voice Messaging Services, Memorandum Opinion and Order, 3 FCC Rcd. 6912, para. 1 (1988).

<sup>&</sup>lt;sup>21</sup> See, e.g., In re Ameritech's Comparably Efficient Interconnection Plan for Electronic Vaulting Service, Order, 15 FCC Rcd. 80, 81, para. 1 (1997) [hereinafter Ameritech's CEI Plan].

<sup>&</sup>lt;sup>22</sup> See In re Independent Data Communications Manufacturers Association, Inc., Petition for Declaratory Ruling That AT&T's InterSpan Frame Relay Service Is a Basic Service, Memorandum Opinion and Order, 10 FCC Rcd. 13,717, 13,717–19, paras. 4, 11 (1995) [hereinafter Frame Relay] (concluding that frame relay and X.25 services are basic services).

<sup>23</sup> See 47 C.F.R. § 64.702(a).

lishing."<sup>24</sup> The Commission has determined that information services consist of all services that the Commission previously considered to be enhanced services. However, the Commission also has determined that while all enhanced services are information services, not all information services are enhanced services.<sup>25</sup>

### B. Bell Operating Companies

The Computer Inquiry rules apply to ESPs, BOCs and GTE<sup>26</sup>; they do not necessarily apply to all telecommunications carriers. BOCs are the local telephone operating companies that were created during the breakup of AT&T. As a result of mergers, consolidations and acquisitions, the list of BOCs has evolved into the following:<sup>27</sup>

${ m RBOC}^{28}$	Owner of the following BOCs <sup>29</sup>
Verizon	Bell Atlantic, GTE, The Chesapeake and Potomac
	Telephone Company, The Chesapeake and Potomac
	Telephone Company of Maryland, The Chesapeake and
	Potomac Telephone Company of Virginia, The
	Chesapeake and Potomac Telephone Company of West
	Virginia, NYNEX, The New York Telephone Company,
	The Bell Telephone Company of Pennsylvania, The
	Diamond State Telephone Company, New Jersey Bell
	Telephone Company and New England Telephone and
	Telegraph Company
SBC	Southwestern Bell, Ameritech, Pacific Bell, Nevada Bell,
	Illinois Bell, Indiana Bell, Michigan Bell, Ohio Bell and
	Wisconsin Telephone.
Bell South	South Central Bell, Southeastern Bell and Southern Bell
Owest	US West, Mountain Bell, Northwestern Bell and Pacific
~	Northwest Bell <sup>30</sup>

Although these companies are responsible for the vast majority of the local access lines,<sup>31</sup> there are approximately 1,200 other local exchange carriers ("LECs").<sup>32</sup> These are not considered BOCs.

Bell System operating companies, and to which one or more of the Bell System local telephone companies were assigned." Federal Standard 1037C, Telecommunications: Glossary of Telecommunications Terms, at http://glossary.its.bldrdoc.gov/fs-1037/fs-1037c.htm (Aug. 7, 1996). There are only four RBOCs remaining as a result of mergers and acquisitions.

<sup>29</sup> 47 U.S.C. § 153(4). Note that Cincinnati Bell ("Broadwing") and Southern New England Bell ("SNET") are not BOCs.

<sup>30</sup> US West has merged with Qwest, which is not a BOC. See In re Qwest Communications International Inc. and US West, Inc.; Applications for Transfer of Control of Domestic and International Sections 214 and 310 Authorizations and Application to Transfer Control of a Submarine Cable Landing License, Memorandum Opinion and Order, 15 FCC Rcd. 5376, para. 2 (2000).

31 See Fed. Comm. Cmm'n, Y2K Communications Sector Report: Wireline Telecommunications Supplement, at http://www.fcc.gov/year2000/telephoneb.html (Oct. 1999) (stating that the seven largest LECs, including Sprint and GTE, comprise 92 to 94% of the local access lines in the country); see also Fed. Comm. Cmm'n, FCC's Y2K Communications Sector Report 31, at http://www.fcc.gov/year2000/y2kcsr.html (Mar. 1999).

32 47 U.S.C. § 153(26):

The term 'local exchange carrier' means any person that is engaged in the provision of telephone exchange service or exchange access. Such term does not include a person insofar as such person is engaged in the provision of a commercial mobile service under section 332(c) of this title, except to the extent that the Commission finds that such service should be included in the definition of such term.

<sup>&</sup>lt;sup>24</sup> 47 U.S.C. § 153(2). This is essentially the same definition of Information Services that was used by the federal court in the Modified Final Judgement which broke up AT&T and devised how BOCs would be permitted to operate. See United States v. AT&T, 552 F. Supp. 131, 179 (D.D.C. 1982), aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983), vacated sub nom. United States v. Western Elec. Co., No. 82-0192, 1996 WL 255904 (D.D.C. Apr. 11, 1996) (defining "information services" as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information which may be conveyed via telecommunications").

<sup>&</sup>lt;sup>25</sup> See In re Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities, 64 Fed. Reg. 63,235 (1999) (to be codified at 47 CFR Parts 1, 6 and 7); see also In re Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended, First Report and Order and Notice of Proposed Rulemaking, 11 FCC Rcd. 21,905, 21,955–56, para. 102 (1996).

The FCC approved the merger of Bell Atlantic and GTE on June 16, 2000. Press Release, Federal Communications Commission, FCC Approves Bell Atlantic-GTE Merger with Conditions, available at http://www.fcc.gov/Bureaus/Common\_Carrier/News\_Releases/2000/nrcc0031.txt (June 16, 2000).

<sup>&</sup>lt;sup>27</sup> See also Bell.Com, Regional Bell. Operating Companies, at http://www.bellatlantic.com/bellcom/index3.htm (last visited Oct. 15, 2000) (listing Regional Bell Operating Companies).

<sup>&</sup>lt;sup>28</sup> "Regional Bell Operating Company ('RBOC'): One of the seven holding companies formed by divestiture by the American Telephone and Telegraph Company of its local

### C. Access Charge Exemption

Although the Commission has recognized that [ESPs], including ISPs, use interstate access services, since 1983 it has exempted ESPs from the payment of certain interstate access charges. Pursuant to this exemption, ESPs are treated as end users for purposes of assessing access charges. Thus, ESPs generally pay local business rates and interstate subscriber line charges for their switched access connections to local exchange company central offices. They also pay the special access surcharge on their special access lines under the same conditions applicable to end users. In the Access Charge Reform Order, the Commission decided to maintain the existing pricing structure and continue to treat ESPs as end users for the purpose of applying access charges. The Commission stated that retaining the ESP exemption would avoid disrupting the still-evolving information services industry and advance the goals of the Telecommunications Act of 1996 to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services.<sup>33</sup>

# IV. COMPUTER II—STRUCTURAL SEPARATION

The first of the two regulatory regimes that a BOC can elect to follow in order to enter the enhanced service provider market is *Computer II*. In order to enter the ESP market, BOCs must set up a structurally separate ESP subsidiary.<sup>34</sup>

The requirements of *Computer II* are found at Section 64.702 of the Commission's rules. These rules indicate that BOCs may enter the ESP market specifically if:

- it is done through a separate corporate entity that obtains all telecommunications facilities and services pursuant to tariff and may not own its own telecommunications facilities;
- the separate subsidiary operates independently in the furnishing of enhanced services and customer premises equipment;
- the separate subsidiary deals with any affiliated manufacturer on an arm's length basis;
- any joint research and development must be done on a compensatory basis; and
- all transactions between the separate subsid-

iary and the carrier or its affiliates must be reduced to writing.<sup>35</sup>

BOCs electing to provide enhanced services through a separate subsidiary also must comply with the following requirements:

- The BOC cannot engage in the sale or promotion of the enhanced services or customer premises equipment on behalf of the separate enhanced services subsidiary (i.e., Bell can not promote the services of the separate subsidiary Bell.net).
- The BOC cannot provide to its separate enhanced services subsidiary computer services that are used in any way for the provision of its common carrier services.
- The BOC's capitalization plan for the separate corporation must be approved by the FCC.<sup>36</sup>

# V. COMPUTER III—NONSTRUCTURAL SAFEGUARDS

### A. Purpose

The second regulatory regime that BOCs can follow in order to enter the ESP/ISP market is the *Computer III* regime, which sets forth nonstructural safeguards. The Commission concluded that the separate subsidiary obligations under the *Computer II* regime were unnecessarily cumbersome. The Commission believed that it was possible to achieve the goals of the Computer Trilogy without requiring BOCs to create structurally separate subsidiaries.<sup>37</sup> Therefore, the Commission devised nonstructural safeguards known as "Comparably Efficient Interconnection" ("CEI") and "Open Network Architecture" ("ONA").

### B. Status of Rulemaking

The Computer III rulemaking resulted in a series of cases in the Court of Appeals for the Ninth Circuit. In California III,<sup>38</sup> the Ninth Circuit reviewed

<sup>33</sup> In re GTE Telephone Operators GTOC Tariff No. 1 GTE Transmittal No. 1148, Memorandum Opinion And Order, 13 FCC Rcd. 22,466, 22,468–69, para. 7 (1998) (citations omitted).

<sup>&</sup>lt;sup>34</sup> See Computer III Order 1999, 14 FCC Rcd. at 4294, para. 7; In re Bell Operating Companies Joint Petition for Waiver of Computer II Rules, Order, 10 FCC Rcd. 13,758, 13,758–59, para. 3 (1995) [hereinafter BOC's Joint Petition]; In re Amendment of Section 64.702 of the Commission's Rules and Regu-

lations (Second Computer Inquiry), Final Decision, 77 F.C.C.2d 384, 474, para. 229 (1980).

<sup>35 47</sup> C.F.R. § 64.702(c)(1)-(5).

<sup>&</sup>lt;sup>36</sup> 47 C.F.R. § 64.702(d)(1), (4). Some provisions of section 64.702(d) have been superceded by provisions of the Telecommunications Act of 1996. See infra Section VI.C-D.

<sup>&</sup>lt;sup>37</sup> See Computer III Order 1999, 14 FCC Rcd. at 4294, para. 7.

<sup>38</sup> California v. FCC, 39 F.3d 919 (9th Cir. 1994) [herein-

the Commission's move from structural to nonstructural safeguards, and:

found that, in granting full structural relief based on the BOC ONA plans, the Commission had not adequately explained its apparent 'retreat' from requiring 'fundamental unbundling' of BOC networks as a component of ONA and a condition for lifting structural separation. The court was therefore concerned that ONA unbundling, as implemented, failed to prevent the BOCs from engaging in discrimination against competing ESPs in providing access to basic services.<sup>39</sup>

The Commission concluded that the Court in California III vacated only the Commission's ONA rules, not the CEI rules. Therefore, the Commission issued the Interim Waiver Order that permitted BOCs to provide enhanced services if they complied with the CEI rules.<sup>40</sup> In addition, BOCs must comply with procedures set forth in the ONA plans that they had already filed with and had approved by the Commission.<sup>41</sup> The Commission also released a Further Notice of Proposed Rulemaking in order to resolve the issues addressed in California III.<sup>42</sup> This rulemaking is still pending.<sup>43</sup>

In sum, currently under *Computer III*, CEI is an ongoing obligation where BOCs choose to provide enhanced services and filed ONA plans remain binding.

after California III].

## C. Comparably Efficient Interconnection

Computer III has two phases. The first is Comparatively Efficient Interconnection. Where a BOC seeks to offer an enhanced service, it may do so on an "integrated basis," provided the BOC create a CEI Plan.<sup>44</sup> "In these CEI plans, the Commission require[s] the BOCs to demonstrate how they [will] provide competing [ESPs] . . . with 'equal access' to all basic underlying network services the BOCs [use] to provide their own enhanced services."<sup>45</sup> CEI was designed to prevent cross subsidization and discrimination.<sup>46</sup>

Phase I was planned to be an interim phase until Phase II, Open Network Architecture, was implemented. The Ninth Circuit Court of Appeals, however, vacated the Commission's ONA rules. The Commission also released the *Interim Order*,<sup>47</sup> indicating that if BOCs want to deploy any new ESP services, they must create CEI plans.<sup>48</sup>

### 1. Where to Find CEI Plans

Previously, CEI plans had to be filed with the Commission for approval. In March of 1999, the Commission issued an order revising *Computer III* 

<sup>&</sup>lt;sup>39</sup> In re Computer III Further Remand Proceedings: Bell Operating Company Provision Of Enhanced Services, 1998 Biennial Regulatory Review—Review of Computer III and ONA Safeguards and Requirements, Further Notice of Proposed Rulemaking, 13 FCC Rcd. 6040, 6051, para. 15 (1998) [hereinafter Computer III FNPRM 1998] (citing California III, 39 F.3d at 930).

<sup>&</sup>lt;sup>40</sup> See Computer III FNPRM 1998, 13 FCC Rcd. at 6052, para. 16.

<sup>41</sup> Ameritech's CEI Plan, 13 FCC Rcd. at 83, para. 6; see BOC's Joint Petition, 10 FCC Rcd. at 13,762, para. 22; Bell Atlantic's CEI Plan, 11 FCC Rcd. at 987, para. 4; In re Computer III Further Remand Proceedings: Bell Operating Company Provision Of Enhanced Services, Notice of Proposed Rulemaking, 10 FCC Rcd. 8360, 8367–70, paras 9–12 (1995) [hereinafter Computer III Remand 1995].

<sup>42</sup> Computer III Remand 1995, 10 FCC Rcd. at 8360, 8361, para. 1. See also Computer III FNPRM 1998, 13 FCC Rcd. at 6040, 6042, para. 1; Computer III Order 1999, 14 FCC Rcd. at 4292, para. 4 (eliminating requirement that BOCs receive approval of CEI plans from FCC and permitting BOCs to simply post plans on websites and provide notice to FCC); In re Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review—Review of Computer III and ONA Safeguards and Requirements, Order, 14 FCC Rcd. 21,628, 21,629, para. 4

<sup>(1999) [</sup>hereinafter Computer III Order on Reconsideration 1999] (denying CIX's petition for reconsideration).

<sup>43</sup> This Guide presents a summary of the *Computer III* rules as they currently are and does not address the issues raised in the current rulemaking.

<sup>44</sup> See, e.g., Computer III FNPRM 1998, 13 FCC Rcd. at 6043, para. 2; see Ameritech's CEI Plan, 13 FCC Rcd. at 87, para. 4; see Bell Atlantic's CEI Plan, 11 FCC Rcd. at 987, para. 2.

<sup>45</sup> BOC's foint Petition, 10 FCC Rcd. at 13,759, para. 3; see also Ameritech's CEI Plan, 13 FCC Rcd. at 87, para. 16 ("The CEI requirements are designed to give ESPs equal and efficient access to the basic services that the BOCs use to provide their own enhanced services.").

<sup>&</sup>lt;sup>46</sup> Ameritech's CEI Plan, 13 FCC Rcd. at 82, para. 3; In re Filing and Review of Open Network Architecture Plans, Phase I, Memorandum Opinion and Order, 4 FCC Rcd. 1, 12, 17–18, paras. 4, 17 (1988) [hereinafter ONA Review].

<sup>47</sup> In re Amendment of Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry); and Policy Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Thereof; Communications Protocols under 64.702 of the Commission's Rules and Regulations, Interim Order, 104 F.C.C.2d 958 (1986) [hereinafter Interim Order].

<sup>&</sup>lt;sup>48</sup> See supra Section V.B for important information on litigation concerning these rules and the status of an FCC proceeding that will revise these rules.

obligations, stating that BOCs need only post their CEI plans on their websites and file notice with the Commission concerning the plan's location.49 In December of 1999, the Commission clarified that BOCs must post to their websites all existing and new CEI plans and amendments.<sup>50</sup> In other words, this provision is retroactive—a CEI plan must be posted to its web page even if it was filed with the FCC prior to March 1999.

### 2. Nine Parameters

In a CEI plan, a BOC must describe how it intends to comply with the CEI 'equal access' parameters for the specific enhanced service it intends to offer. The CEI equal access parameters, discussed in greater detail below, include: interface functionality; unbundling of basic services; resale; technical characteristics; installation, maintenance and repair; end user access; CEI availability; minimization of transport costs; and availability to all interested customers or ESPs.51

### The FCC:

made clear that the CEI parameters could be satisfied in a flexible manner, consistent with the particular services at issue. The Commission 'did not require absolute technical equality, but rather sought to provide fairness and efficiency for all competing enhanced service providers.' Factors in evaluating whether this standard has been met include the absence of systematic differences between the basic services given to the carrier and to others, end user perception of quality, and utility to other ESPs.52

### Interface Functionality

### The BOC:

must 'make available standardized hardware and software interfaces that are able to support transmis-

sion, switching, and signaling functions identical to

Computer III Order 1999, 14 FCC Rcd. at 4297, para. 12. 50 Computer III Order on Reconsideration 1999, 14 FCC Rcd. at 21,630, para. 6.

BOC's Joint Petition, 10 FCC Rcd. at 13,764, para. 35.

those utilized in the enhanced service provided by the carrier.' This provision ensures that a competitive ISP will know what interfaces it must use to interconnect with the BOC's network.53

### Unbundling of Basic Service

### The BOC:

must unbundle, and associate with a specific rate in the tariff, the basic services and basic service functions that underlie the carrier's enhanced service offering. This provision ensures that a competitive ISP can purchase the underlying telecommunications services on which it bases its enhanced services. For example, an ISP might purchase tariffed transport services for its voicemail service.54

"Nonproprietary information used by the carrier in providing the unbundled basic services must be made available as part of CEI. In addition, any options available to a carrier in the provision of such basic services or functions must be included in the unbundled offerings."55

#### Resale C

The BOC's 'enhanced service operations [must] take the basic services used in its enhanced services offerings at their unbundled tariffed rates as a means of preventing improper cost-shifting to regulated operations and anticompetitive pricing in unregulated markets.' This provision ensures that both BOC and non-BOC ISPs pay the same amount for the underlying telecommunications services obtained from the BOC.56

### Technical Characteristics

The BOC "must provide basic services with technical characteristics that are equal to the tech-

Carrier Services and Facilities Authorizations Thereof: Communications Protocols under Section 64.702 of the Commission's Rules and Regulations, Report and Order, 104 F.C.C.2d 958, 1039, para. 157 (1986) [hereinafter Amendment 64.702 Report & Order]). See, e.g., BOC's Joint Petition, 10 FCC Rcd. at 13,765, para. 37; GTE ONA, 11 FCC Rcd. at 1409, para. 42; Bell Atlantic's CEI Plan, 11 FCC Rcd. at 994, para. 17; ONA Review, 4 FCC Rcd. at 72, para. 137.

Computer III Order 1999, 14 FCC Rcd. at 4298, para. 13. See, e.g., Ameritech's CEI Plan, 13 FCC Rcd. at 88, para. 17; GTE ONA, 11 FCC Rcd. at 1410, para. 44; Bell Atlantic's CEI Plan, 11 FCC Rcd. at 991-92, para. 11.

Ameritech's CEI Plan, 13 FCC Rcd. at 89, para. 17.

Computer III Order 1999, 14 FCC Rcd. at 4298, para. 13 (citing Amendment 64.702 Report & Order, 104 F.C.C.2d at 1040, para. 160). See, e.g., Ameritech's CEI Plan, 13 FCC Rcd. at 90, para. 25; BOC's Joint Petition, 10 FCC Rcd. at 13,765, para. 38; GTE ONA, 11 FCC Rcd. at 1411, para. 46; Bell Atlantic's CEI Plan, 11 FCC Rcd. at 995, para. 19.

In re Application of Open Network Architecture and Nondiscrimination Safeguards to GTE Corporation, Memorandum Opinion and Order, 11 FCC Rcd. 1388, 1408-09, para. 41 (1995) [hereinafter GTE ONA] (citing In re Amendment of Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry); and Policy and Rules Concerning Rates for Competitive Common Carrier Service and Facilities Authorizations Thereof; Communications Protocols under Section 64.702 of the Commission's Rules and Regulations, Memorandum Opinion and Order on Reconsideration, 2 FCC Rcd. 3035, 3048, para. 92 (1987) [hereinafter Amendment 64.702 Order on Reconsideration]).

<sup>53</sup> Computer III Order 1999, 14 FCC Rcd. at 4298, para. 13 (citing In re Amendment of Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry); and Policy and Rules Concerning Rates for Competitive Common

nical characteristics the carrier uses for its own enhanced services. This provision ensures that a competitive ISP can base its enhanced offering on telecommunications services that are of equal quality to those which the BOC's customers receive."57

These characteristics include, but are not limited to: transmission parameters, such as bandwidth and bit rates; quality, such as bit error rate and delay distortions; and reliability, such as mean time between failures. The Phase I Reconsideration stated that the standard 'does not demand impossible or grossly inefficient over-engineering of the network so that absolute equality is always achieved.' We specifically recognized, for example, that the signal level of an analog data connection will decrease to some extent with the loop distance from the central office.<sup>58</sup>

### e. Installation, Maintenance and Repair

The BOC must provide the same time periods for installation, maintenance, and repair of the basic services and facilities included in a CEI offering as those the carrier provides to its own enhanced service operations. This provision ensures that a competitive ISP can offer its customers support services of equal quality to those which the BOC's customers receive.<sup>59</sup>

"Carriers also must satisfy reporting and other requirements showing that they have met this requirement." 60

### f. End User Access

The BOC must provide to all end users the same abbreviated dialing and signaling capabilities that are needed to activate or obtain access to enhanced services that use the carrier's facilities, and provides to end users equal opportunities to obtain access to basic facilities through derived channels, whether they use the enhanced service offerings of the carrier or of a competitive provider. This provision ensures that a competitive ISP's customers will have the same access as the BOC's customers to special network functions offered in con-

junction with information services. 61

### g. CEI Availability

The BOC must make its CEI offering available and fully operational on the date that it offers its corresponding enhanced service to the public, and provide a reasonable period of time when prospective users of the CEI offering can use the CEI facilities and services for purposes of testing their enhanced service offerings. This provision ensures that a non-BOC ISP is not put at a competitive disadvantage by a BOC initiating a service before the BOC makes interconnection with the BOC's network available to competitive ISPs, so that they are able to initiate a comparable service. <sup>62</sup>

Consequently, the Commission has required the BOCs to notify unaffiliated ESPs in advance about the impending deployment of new basic services . . . In addition, the Commission has separately stated that a carrier's CEI plan should contain a description of the geographic areas in which it will offer the enhanced service, as well as the network locations within those areas through which it will provide such service. <sup>63</sup>

### h. Minimization of Transport Costs

"The BOC must provide competitors with interconnection facilities that minimize transport costs. This provision ensures that BOCs cannot require competitive ISPs to purchase unnecessarily expensive methods of interconnection with the BOC's network."<sup>64</sup> The Commission does not:

require LECs to provide physical collocation for ONA. The Commission has upheld the use of price parity by the BOCs to satisfy their obligation to minimize transmission costs, and specifically has found two miles to be a reasonable minimum distance for price parity associated with a distance-sensitive banded tariff.<sup>65</sup>

We clarified that multiplexing those connections to aggregate traffic is not the only acceptable cost-reduction technique. Instead, a BOC may satisfy this requirement by charging the same transmission rates to all [ESPs], including its own enhanced service operations and those of non-collocated competitors. <sup>66</sup>

<sup>57</sup> Computer III Order 1999, 14 FCC Rcd. at 4298, para. 13. See, e.g., Ameritech's CEI Plan, 13 FCC Rcd. at 91, para. 27; BOC's foint Petition, 10 FCC Rcd. at 13,765, para. 39; GTE ONA, 11 FCC Rcd. at 1411, para. 48; Bell Atlantic's CEI Plan, 11 FCC Rcd. at 995, para. 21; ONA Review, 4 FCC Rcd. at 75, para. 144

<sup>&</sup>lt;sup>58</sup> ONA Review, 4 FCC Rcd. at 75, para. 144 (citing Amendment 64.702 Order on Reconsideration, 2 FCC Rcd. at 3048, paras. 87, 92).

<sup>59</sup> Computer III Order 1999, 14 FCC Rcd. at 4298, para. 13. See, e.g., Ameritech's CEI Plan, 13 FCC Rcd. at 92, para. 30; BOC's Joint Petition, 10 FCC Rcd. at 13,765, para. 40; GTE ONA, 11 FCC Rcd. at 1412, para. 50; Bell Atlantic's CEI Plan, 11 FCC Rcd. at 995–96, para. 23.

<sup>60</sup> Ameritech's CEI Plan, 13 FCC Rcd. at 92, para. 30.

<sup>61</sup> Computer III Order 1999, 14 FCC Rcd. at 4298–99, para. 13. See, e.g., Ameritech's CEI Plan, 13 FCC Rcd. at 92–93, para.

<sup>32;</sup> BOC's Joint Petition, 10 FCC Rcd. at 13,765, para. 41; GTE ONA, 11 FCC Rcd. at 1412, para. 51; Bell Atlantic's CEI Plan, 11 FCC Rcd. at 996, para. 25.

<sup>62</sup> Computer III Order 1999, 14 FCC Rcd. at 4299, para. 13. See, e.g., BOC's Joint Petition, 10 FCC Rcd. at 13,765, para. 42; GTE ONA, 11 FCC Rcd. at 1412–13, para. 53; Bell Atlantic's CEI Plan, 11 FCC Rcd. at 997, para. 27.

<sup>63</sup> Ameritech's CEI Plan, 13 FCC Rcd. at 93–94, para. 34.
64 Computer III Order 1999, 14 FCC Rcd. at 4299, para. 13.
See, e.g., Ameritech's CEI Plan, 13 FCC Rcd. at 94, para. 36;
BOC's Joint Petition, 10 FCC Rcd. at 13,765, para. 43; Bell Atlantic's CEI Plan, 11 FCC Rcd. at 997, para. 29.

<sup>65</sup> GTE ONA, 11 FCC Rcd. at 1414, para. 57.

<sup>66</sup> ONA Review, 4 FCC Rcd. at 19-20, 78, paras. 22, 150-51.

The Phase I Order declined to require the BOCs to provide collocation opportunities to ESPs. Instead, we re-

### i. Recipients of CEI

"The BOC is prohibited from restricting the availability of the CEI offering to any particular class of customer or enhanced service competitor. This provision ensures that BOCs do not engage in anticompetitive teaming with one competitive ISP and against others." 67

### D. Open Network Architecture

The second phase of *Computer III* is Open Network Architecture.

During the second stage of *Computer III*, the BOCs developed and implemented Open Network Architecture . . . plans detailing the unbundling of basic network services; after the Commission approved these ONA plans and the BOCs filed tariffs for ONA services, they [would have been] permitted to provide integrated enhanced services without filing service-specific CEI plans.<sup>68</sup>

The ONA requirements apply to the BOCs and GTE.<sup>69</sup> "The ONA requirements apply to the BOCs regardless of whether they provide information services on an integrated or separated basis."<sup>70</sup>

In response to the Ninth Circuit Court of Appeals vacating the Commission's ONA rules, the Commission released an *Interim Order* indicating that the BOCs are bound by any previously approved ONA plans, and that if BOCs wanted to deploy any new ESP services, they must create a CEI plan.<sup>71</sup>

### 1. How it Works

"ONA is the overall design of a carrier's basic network services to permit all users of the basic network, including the information services oper-

quired BOCs to provide interstate facilities that minimize transmission costs. We stated that loop or trunk multiplexing is one technique for minimizing such costs and that collocation is another option, and required carriers to demonstrate what steps they would take to reduce transmission costs for competitors. The Phase II Reconsideration held that BOCs could satisfy our requirement to minimize transmission costs by offering price parity. We said that carriers need only minimize transmission costs through some means or charge themselves the same rates that they charge others.

Id. (citations omitted).

67 Computer III Order 1999, 14 FCC Rcd. at 4299, para. 13. See, e.g., Ameritech's CEI Plan, 13 FCC Rcd. at 95, para. 38; BOC's Joint Petition, 10 FCC Rcd. at 13,765, para. 44; GTE ONA, 10 FCC Rcd. at 1414, para. 58; Bell Atlantic's CEI Plan, 11 FCC Rcd. at 998, para. 31.

ations of the carrier and its competitors, to interconnect to specific basic network functions and interfaces on an unbundled and equal-access basis."72 The BOCs and GTE through ONA must unbundle key components, or elements, of their basic services and make them available under tariff, regardless of whether their information services operations utilize the unbundled components. Such unbundling ensures that competitors of the carrier's information services operations can develop information services that utilize the carrier's network on an economical and efficient basis.<sup>73</sup> This serves to create a level playing field where the BOC-affiliated ESPs and nonaffiliated ESPs have the opportunity to take network services on the same tariffs, terms and conditions.

[T]he Commission declined to adopt any specific network architecture proposals or specific unbundling requirements, but instead set forth general standards for ONA. BOCs were required to file initial ONA plans presenting a set of 'unbundled basic service functions that could be commonly used in the provision of enhanced services to the extent technologically feasible.' The Commission stated that, by adopting general requirements rather than mandating a particular architecture for implementing ONA, it wished to encourage development of efficient interconnection arrangements. The Commission also noted that inefficiencies might result from 'unnecessarily unbundled or splintered services.'<sup>74</sup>

### The Commission:

required the BOCs to meet a defined set of unbundling criteria in order for structural separation to be lifted. In the BOC ONA Order, the Commission generally approved the 'common ONA model' proposed by the BOCs. The common ONA model was based on the existing architecture of the BOC local exchange networks, and consisted of unbundled services categorized as basic service arrangements ('BSAs'), basic service elements ('BSEs'), complementary network services

74 Computer III FNPRM 1998, 13 FCC Rcd. at 6056-57, para. 25 (citing California v. FCC, 39 F.3d 919, 930 (9th Cir. 1994)).

<sup>68</sup> BOC's Joint Petition, 10 FCC Rcd. at 13,759, para. 3.

<sup>&</sup>lt;sup>69</sup> See ONA Review, 4 FCC Rcd. at 18, para. 19 (stating that ONA requirements do not apply to AT&T).

<sup>&</sup>lt;sup>70</sup> Ameritech's CEI Plan, 13 FCC Rcd. at 85, para. 7 n.18; see also BOC's Joint Petition, 10 FCC Rcd. at 13,763, para. 26.

<sup>71</sup> See supra Section V.B for important information on litigation concerning these rules and the status of an FCC proceeding that will revise these rules.

<sup>72</sup> Computer III Order 1999, 14 FCC Rcd. at 4300, para. 14 n.46; see also Computer III Remand 1995, 10 FCC Rcd. at 8371, paras. 15–16.

<sup>&</sup>lt;sup>78</sup> See Computer III Remand 1995, 10 FCC Rcd. at 8371, paras. 15–16; see also GTE ONA, 11 FCC Rcd. at 1388, para. 2 (noting that ONA requirements were extended to GTE).

('CNSs'), and ancillary network services ('ANSs').<sup>75</sup>

The Commission additionally requires the BOCs, while preparing their ONA plans, to meet with ESPs in order to determine the needs of industry.<sup>76</sup>

### a. Purpose of ONA

In devising ONA as a precondition to removal of structural separation for the enhanced service operations of the BOCs, we sought to establish a regulatory framework that would permit the BOCs to participate efficiently in the enhanced services market while preventing anticompetitive conduct based on BOC control of underlying, local communications networks. We found that while structural separation is one way to serve the goal of preventing anticompetitive conduct, it does so at significant cost by imposing inefficient restrictions on the ways the BOCs can develop, technically configure, and offer enhanced services to the public. We also concluded in Computer III that another major goal of ONA should be to increase opportunities for all [ESPs] to use the BOCs' regulated networks in highly efficient ways so that they can both expand their markets for their present services and develop new offerings that can better serve the American public.<sup>77</sup>

# Computer III Open Network Architecture

- Basic Elements
  - Basic Service Elements
    - · i.e., Calling Number Identification
  - Basic Serving Arrangements
    - Fundamental tariffed switching and transport services
  - Complimentary Network Service
    - i.e., stutter dial tone, call waiting, call forwarding, call forwarding on busy, hunting
  - Ancillary Network Service
    - i.e., billing services, collection, protocol processing

### b. Basic Service Element

Basic Service Elements ("BSEs") "are optional unbundled features (such as Calling Number Identification) that an ESP may require or find useful in configuring an enhanced service."<sup>78</sup> They have also been defined as "unbundled basic

service 'building blocks.' "<sup>79</sup> The Commission concluded that these are basic services that ESPs need in order to provide service.<sup>80</sup>

The ONA Review required BOCs to provide BSEs within the Commission's interstate access tariff framework.81 The Commission concluded that such unbundled BSEs should include all basic services that satisfy its three "BSE selection" criteria: "expected market demand for such elements, their utility as perceived by enhanced service competitors, and the technical and costing feasibility of such unbundling."82 Such services are referred to as "interstate BSEs." "Thus, if an ESP takes an interstate access arrangement (e.g., a feature group) for access to a BOC's network, any interstate BSEs that are technically compatible with that access arrangement must be unbundled in its federal tariff."83 BOCs are required to "offer all interstate BSEs in the federal access tariffs to the degree technically possible."84

### c. Basic Serving Arrangement

BOCs also are required to tariff Basic Serving Arrangements.<sup>85</sup>

BSAs are the fundamental tariffed switching and transport services that allow an ESP to communicate with its customers through the BOC network. Under the common ONA model, an ESP and its customers must obtain some form of BSA in order to access the network functionalities that an ESP needs to offer its specific services. Examples of BSAs include line-side and trunk-side circuit-switched service, line-side and trunk-side packet-switched service, and various grades of local private line service. <sup>86</sup>

"[B]oth BSAs and BSEs are essential basic service building blocks of a truly open network architecture and thus both are subject to our ONA rules."87

### d. Complementary Network Service

"CNSs are optional unbundled basic service features (such as stutter dial tone) that an end user

 $<sup>^{75}</sup>$   $\,$  Id. at 6057, para. 26; see also ONA Review, 4 FCC Rcd. at 36, para. 56.

<sup>&</sup>lt;sup>76</sup> See ONA Review, 4 FCC Rcd. at 18, para. 18.

<sup>77</sup> ONA Review, 4 FCC Rcd. at 11, para. 2; see also Computer III Remand 1995, 10 FCC Rcd. at 8372, para. 17 ("ONA exists to promote a fair competitive marketplace for the provision of enhanced services."); ONA Review, 4 FCC Rcd. at 15, para. 14 ("Properly implemented, ONA will do more than prevent the BOCs from discriminating against their competitors in the provision of basic services that BOCs provide to their own ESP affiliates.").

<sup>78</sup> ONA Review, 4 FCC Rcd. at 36, para. 57.

<sup>&</sup>lt;sup>79</sup> *Id.* at 25, para. 30.

<sup>80</sup> Id. at 44, para. 75.

<sup>81</sup> *Id.* at 48, para. 86.

<sup>82</sup> *Id.* at 60, para. 112.

<sup>83</sup> *Id.* at 48–49, para. 86.

<sup>84</sup> Id. at 14, para. 10; see also GTE ONA, 10 FCC Rcd. at 7770-71, para. 14.

<sup>85</sup> See GTE ONA, 10 FCC Rcd. at 7770–71, para. 14.

<sup>86</sup> ONA Review, 4 FCC Rcd. at 36, para. 56.

<sup>87</sup> *Id.* at 45, para. 77.

may obtain from a carrier in order to access or to receive an enhanced service."88

CNSs have two principal characteristics. First, CNSs are associated with end users', rather than ESPs', access arrangements. Second, CNSs are locally tariffed, basic services that the BOCs will offer to end users whether or not such users are customers of ESPs—that is, such services give end users access to the network for a variety of applications, not merely enhanced service applications. 89

Examples of CNSs include 'Custom Calling' services, such as call waiting and call forwarding; variations of such services, such as call forwarding on busy or no answer; and other optional features, such as hunting.<sup>90</sup>

The Commission did not direct the BOCs to create the CNS class of basic services under ONA. However, the Commission saw no reason to prohibit the use of the CNS category by BOCs as long as adequate safeguards exist to protect against potential discrimination in the delivery of CNSs to ESP customers. Indeed, the Commission concluded that it may be of some benefit to retain a category of services that organizes network capabilities for end users and provides them a measure of flexibility in choosing such capability with their enhanced services.<sup>91</sup>

The Commission emphasized that BOCs must "provide CNSs on a nondiscriminatory basis—that is, since the BOCs provide CNSs as basic services to end users, the BOCs cannot favor their own enhanced service customers in any way in the provision of CNSs."<sup>92</sup> At the time the Commission reviewed the BOC's ONA plans, it concluded that:

[b]ecause the BOCs provide CNSs to all end users pursuant to tariff for purposes other than simply to facilitate [the] provision of an enhanced service, the potential for any discriminatory behavior by the BOCs in offering such services is speculative. Moreover, the BOCs' standardized ordering and provisioning systems for providing basic services to end users provide still more assurance that the BOCs will not be able to discriminate against end users who purchase CNSs for use with a competing ESP's enhanced services.<sup>93</sup>

CNSs and BSEs are at times indistinguishable; different BOCs listed essentially the same services differently, one listing it as a CNS and the other as a BSE.<sup>94</sup> Nevertheless, the Commission concluded that:

the BOCs' service classifications should not have different practical consequences for federal tariffing pur-

### e. Ancillary Network Service

"ANSs are other services that the BOCs say fall outside of the ONA construct, but which may be useful to ESPs." Examples of ANS include unregulated services such as billing, collection and protocol processing. 97

When the Commission reviewed the BOCs ONA plans, the Commission noted that the BOCs did include a number of regulated, basic services in this category. In order to avoid confusion, the Commission directed BOCs to amend their ONA plans, moving any regulated services from ANS to BSE, BSA or CNS.98 This was designed to leave only unregulated services in the ANS class.

The Commission concluded that:

ANSs are competitive, deregulated services that are not subject to regulation under Title II. ESPs can obtain ANSs from sources other than the local exchange carriers. Thus, while the Commission has ancillary authority under Title I to require the provision of a particular ANS, there is no reason for us to exercise that authority here. <sup>99</sup>

Specifically, in terms of billing and collection services, the Commission found that these services had been deregulated, were incidental to communications and need not be tariffed. Therefore, the Commission did not require BOCs to offer these services pursuant to the ONA requirements. However, BOCs were required to describe any services they plan to offer that would provide ESPs with information that is useful for "bill preparation such as the calling number, billing address or du-

poses . . . [W]e require the BOCs to provide BSEs within our interstate access tariff framework. We conclude here that such unbundled BSEs should include all basic services that satisfy our three 'BSE selection' criteria regardless of whether the BOCs now classify such services as BSEs or CNSs. We refer to such services as 'interstate BSEs.' Thus, if an ESP takes an interstate access arrangement (e.g., a feature group) for access to a BOC's network, any interstate BSEs that are technically compatible with that access arrangement must be unbundled in its federal tariff. Accordingly, for federal tariffing purposes, there is no separate service category of CNSs (a result that is consistent with the definition of CNSs in the common model as state-tariffed services.) 95

<sup>88</sup> Id. at 36, para. 57.

<sup>89</sup> Id. at 47, para. 83.

<sup>90</sup> *Id.* at 145-46, para. 280.

<sup>91</sup> See id. at 47, para. 84.

<sup>92</sup> *Id.* at 48, para. 85.

<sup>93</sup> Id.

<sup>94</sup> See id. at 48, para. 85 n.157.

<sup>95</sup> *Id.* at 48, para. 86.

<sup>96</sup> Id. at 36, para. 57.

<sup>97</sup> GTE ONA, 11 FCC Rcd. at 1395–96, para. 12.

<sup>98</sup> See ONA Review, 4 FCC Rcd. at 58, para. 106.

<sup>99</sup> GTE ONA, 11 FCC Rcd. at 1395–96, para. 12.

ration of a call."100

### 2. Discrimination

The BOCs and GTE are also required to establish procedures to ensure that they do not discriminate in their provision of ONA services, including the installation, maintenance, and quality of such services, to unaffiliated ISPs and their customers. For example, they must establish and publish standard intervals for routine installation orders based on type and quantity of services ordered, and follow these intervals in assigning due dates for installation, which are applicable to orders placed by competing service providers as well as orders placed by their own information services operations. In addition, they must standardize their maintenance procedures where possible, by assigning repair dates based on nondiscriminatory criteria (e.g., available work force and severity of problem), and handling trouble reports on a first-come, first-served basis. 101

"The Commission require[d] carriers to state explicitly in their ONA plans that they will offer their BSAs and BSEs in compliance with the *Computer III* nondiscrimination and equal access safeguards." <sup>102</sup>

### a. Letters of Authorization

One particular issue arose with CNSs. Some BOCs required ESPs to present a written letter of authorization prior to the BOCs initiating CNS service. The Commission's primary concern in reviewing this situation was discrimination. If the BOC makes the same letter of authorization requirement of its own ESP as it does of nonaffiliated ESPs, then there is no issue of discrimination. If, however, the BOC does not require a letter of authorization from its own ESPs, then it is a discriminatory practice and therefore impermissible. 103

### b. Resale

Another issue that arose was resale restrictions

rictions

placed on ESPs by the BOCs. Again, the Commission found that when resale restrictions applied equally to the general body of subscribers, there was little anticompetitive danger. However, where resale restrictions apply only to unaffiliated ESPs, they have the potential to violate the anti-discrimination principles of ONA. The FCC emphasized its "strong federal policy against resale restrictions, which are a type of use restriction." <sup>104</sup>

### c. Operations Support Systems

The Commission required BOCs to specify the Operations Support Systems ("OSS") they would offer ESPs. In addition it required BOCs to discuss:

[T]heir ability to offer such services in the future. In the BOC ONA Recon[sideration] Order, the Commission determined that continuing development of OSS services is important to the kinds of services ESPs can provide, and defined certain OSS services as ONA services. The Commission recognized that permitting ESPs only indirect access to OSS functions, while allowing affiliates direct access, could result in an uneven playing field. To ensure comparably efficient access, the Commission required a BOC to provide the same access to OSS services to its affiliated enhanced service operations that the BOC provides to unaffiliated ESPs. 105

### d. Nondiscrimination Reporting

In order to demonstrate compliance with the nondiscrimination requirements outlined above [and ensuring BOCs provide the access promised in their CEI plans 106], the BOCs and GTE must file quarterly non-discrimination reports comparing the timeliness of their installation and maintenance of ONA services for their own information services operations versus the information services operations of their competitors. If a BOC or GTE demonstrates in its ONA plan that it lacks the ability to discriminate with respect to installation and maintenance services, and files an annual affidavit to that effect, it may modify its quarterly report to compare installation and maintenance services provided to its own information services operations with services provided to a sampling of all customers. <sup>107</sup> In their

<sup>100</sup> Id. at 1427, para. 91; see also ONA Review, 4 FCC Rcd. at 59, para. 109.

<sup>&</sup>lt;sup>101</sup> Computer III FNPRM 1998, 13 FCC Rcd. at 6099–100, para. 112.

<sup>102</sup> GTE ONA, 11 FCC Rcd. at 1400, para. 25.

<sup>103</sup> See GTE ONA, 11 FCC Rcd. at 1399, para. 23; In re Filing and Review of Open Network Architecture Plans, Phase 1, Memorandum Opinion and Order, 6 FCC Rcd. 7646, 7672, para. 56 (1990); see also ONA Review, 4 FCC Rcd. at 50, para. 88 (declining to rule on issue at that time, but directing BOCs to supplement record).

<sup>104</sup> ONA Review, 4 FCC Rcd. at 171, para. 325; see also GTE ONA, 11 FCC Rcd. at 1398, para. 17.

<sup>105</sup> GTE ONA, 11 FCC Rcd. at 1427-28, para. 93; see also ONA Review, 4 FCC Rcd. at 59, para. 110.

<sup>106</sup> In re Bell Atlantic Telephone Companies Offer Of Comparably Efficient Interconnection To Intranet Management Service Providers, Order, 13 FCC Rcd. 15,617, 15,628, para. 27 (1998); see Ameritech's CEI Plan, 13 FCC Rcd. at 97, para. 45; see BOC's Joint Petition, 13 FCC Rcd. at 13,758–59, para. 3.

<sup>107</sup> In addition, BOCs must file "an annual affidavit, signed by the officer principally responsible for installation procedures, attesting that the BOC had followed installation procedures described in the BOC's ONA plan, and that the BOC had not, in fact, discriminated in the quality of services

quarterly reports, the BOCs and GTE must include information on total orders, due dates missed, and average intervals for a set of service categories specified by the Commission, <sup>108</sup> following a format specified by the Commission. <sup>109</sup>

These reports are filed with the Secretary of the Commission and the Common Carrier Bureau's Policy Division, and are on the Electronic Comment Filing System under CC Docket No. 95-20.

### 3. Deployment

The BOCs are required to give specific dates for deployment of their initial ONA services in their ONA plans.<sup>110</sup> BOCs also have a continuing obligation pursuant to the Commission's Network Information Disclosure rules<sup>111</sup> to provide timely notice of service deployments and alterations.

### 4. New Services

The Commission's rules anticipated a continuously evolving network, and created an ongoing obligation for BOCs to both be responsive to the needs of the ESPs and provide appropriate information when the BOCs deploy new services. Under the ONA rules, when a BOC seeks to de-

it had provided." Computer III FNPRM 1998, 13 FCC Rcd. at 6100, para. 113.

The Commission specified thirteen categories. The specified service categories include: (1) Circuit Switched Line: Business Line, PBX, Centrex, WATS, Mobile, Feature Group A, Foreign Exchange; (2) Circuit Switched Trunk: Feature Group B, Feature Group D, DID (Line and Trunk); (3) Packet Switched Services (X.25 and X.75): Packet DDD Access Line, Packet Synchronous Access Line, Packet Asynchronous Access Line; (4) Dedicated Metallic: Protection Alarm, Protection Relaying, Control Circuit; (5) Dedicated Telegraph Grade: Telegraph Grade 75 Baud, Telegraph 150 Baud; (6) Dedicated Voice Grade: Voice Non-Switched Line, Voice Switched Line, Voice Switched Trunk, Voice and Tone-Radio Land Line, Data Low Speed, Basic Data and Voice, Voice and Data-PSN Access Tie Trunk, Voice and Data-SSN Access, Voice and Data-SSN-Intermachine Trunk, Data Extension-Voice Grade Data, Protection Relay Voice Grade, Telephoto and Facsimile; (7) Dedicated Program Audio: Program Audio 200-3500 HZ, Program Audio 100-5000 HZ, Program Audio 50-8000 HZ, Program Audio 50-15000 HZ; (8) Dedicated Video: TV Channel-One Way 15kHz Audio, TV Channel-One Way 5 kHz Audio; (9) Dedicated Digital: Digital Voice Circuit, Digital Data-2.4kb/s, Digital Data-4.8kb/s, Digital Data-9.6kb/s, Digital Data-56kb/s; (10) Dedicated High Capacity Digital: 1.544 MBPS BSA; (11) Dedicated High Capacity Digital (Greater than 1.544 MBPS): Dedicated Digital-3.152 MBPS, Dedicated Digital-6.312 MBPS, Dedicated Digital-44.736 MBPS, Dedicated Digital-45 MBPS or Higher; (12) Dedicated Alert Transport; (13)

ploy a new BSE or otherwise alter the services in its ONA plan, the BOC must amend its ONA plan at least ninety days prior to the deployment of that service, submitting it to the Commission for approval.<sup>112</sup>

ESPs may also request new ONA services from the BOCs.

[W]hen an ISP identifies a new network functionality that it wants to use to provide an information service, it can request the service directly from the BOC or GTE through a 120-day process specified in our rules, or it can request that the Network Interconnection Interoperability Forum ('NIIF') sponsored by the Alliance for Telecommunications Industry Solutions ('ATIS') 113 consider the technical feasibility of the service. Under the Commission's 120-day request process, an ISP that requests a new ONA basic service from the BOC or GTE must receive a response within 120 days regarding whether the BOC or GTE will provide the service. The BOC or GTE must give specific reasons if it will not offer the service. The BOC or GTE's evaluation of the ISP request is to be based on the ONA selection criteria set forth in the original Phase I Order: (1) market area demand; (2) utility to ISPs as perceived by the ISPs themselves; (3) feasibility of offering the service based on its cost; and (4) technical feasibility of offering the service. If an ISP objects to the BOC or GTE's response, it may seek redress from the Commission by filing a petition for declaratory ruling.114

Additionally, ISPs can ask the NIIF for technical assistance in developing and requesting new network ser-

Dedicated Derived Channel; (14) Dedicated Network Access Link (DNAL).

Computer III FNPRM 1998, 13 FCC Rcd. at 6100, para. 113 n.264.

 $^{109}$   $\,$  Computer III FNPRM 1998, 13 FCC Rcd. at 6100, para. 113.

For installation reports, the Commission requires the BOCs and GTE to report separately for their own affiliated enhanced services operations and for all other customers, whether ISPs or other carriers, and to include information, for each specified service category, on: (1) total orders; (2) due dates missed; (3) percentage of due dates missed; and (4) average interval. The BOCs and GTE are also required to report maintenance activities separately for their own affiliated enhanced services operations and for all other customers. For maintenance activities with due dates, carriers are required to report: (1) total orders; (2) due dates missed; (3) percentage of due dates missed; and (4) average interval. For maintenance activities without due dates, carriers are required to report only total orders and average interval.

Id. at 6100, para. 113 n.265.

110 See GTE ONA, 11 FCC Rcd. at 1400, para. 27.

111 See 47 C.F.R. § 64.702(d)(2) (1999).

<sup>112</sup> See Computer III FNPRM 1998, 13 FCC Rcd. at 6086, para. 81.

113 See Alliance for Telecommunications Industry Solutions, Network Interconnection Interoperability Forum, at http://www.atis.org/atis/clc/niif/niifhom.htm (last visited Oct. 4, 2000).

114 Computer III FNPRM 1998, 13 FCC Rcd. at 6086-87, paras. 82-83; see Computer III Remand 1995, 10 FCC Rcd. at

vices. Upon request, the NIIF will establish a task force composed of representatives from different industry sectors to evaluate the technical feasibility of the service, and through a consensus process, make recommendations on how the service can be implemented. ISPs can then take the information to a specific BOC or GTE and request the service under the 120-day process using the NIIF result to show that the request is technically feasible. 115

### 5. Approved ONA Plans

During the period from 1988 to 1992, the Commission approved the BOCs' ONA plans, which described the basic services that the BOCs would provide to unaffiliated and affiliated ESPs and the terms on which these services would be provided. During the two-year period from 1992 to 1993, the Bureau approved the lifting of structural separation for individual BOCs upon their showing that their initial ONA plans complied with the requirements of the BOC Safeguards Order, and these decisions were later affirmed by the Commission. <sup>116</sup>

### 6. Annual Filing Requirements

The BOCs and GTE are required to file annual ONA reports that include information on:

- (1) annual projected deployment schedules for ONA service, by type of service (BSA, BSE, CNS), in terms of percentage of access lines served systemwide and by market area;
- (2) disposition of new ONA service requests from ISPs;
- (3) disposition of ONA service requests that have previously been designated for further evaluation;
- (4) disposition of ONA service requests that were previously deemed technically infeasible;
- (5) information on Signaling System 7 ("SS7"), Integrated Services Digital Network ("ISDN"), and Intelligent Network ("IN") projected development in terms of percentage of access lines served systemwide and on a market area basis;
- (6) new ONA services available through SS7, ISDN, and IN;

- (7) progress in the IILC (now "NIIF") on continuing activities implementing service-specific and long-term uniformity issues;
- (8) progress in providing billing information including Billing Name and Address ("BNA"), line-side Calling Number Identification ("CNI") or possible CNI alternatives, and call detail services to ISPs;
- (9) progress in developing and implementing OSS services and ESP access to those services;
- (10) progress on the uniform provision of OSS services; and
- (11) a list of BSEs used in the provision of BOC/GTE's own enhanced services. In addition, the BOCs are required to report annually on the unbundling of new technologies arising from their own initiative, in response to requests by ISPs, or resulting from requirements imposed by the Commission.

In addition to the annual ONA reports discussed above, the BOCs and GTE are required to file semiannual ONA reports. These semiannual reports include:

- (1) a consolidated nationwide matrix of ONA services and state and federal ONA tariffs;
- (2) computer disks and printouts of data regarding state and federal tariffs;
- (3) a printed copy and a diskette copy of the ONA Services User Guide;
- (4) updated information on 118 categories of network capabilities requested by ISPs and how such requests were addressed, with details and matrices; and
- (5) updated information on BOC responses to the requests and matrices.<sup>117</sup>

# VI. OTHER NONSTRUCTURAL SAFEGUARDS

In addition to CEI and ONA, there are certain other nonstructural safeguards with which a carrier must comply. While *Computer II & III* applies to BOCs, these rules can apply to all carriers.

<sup>8374-75,</sup> para. 21; ONA Review, 4 FCC Rcd. at 205, 207-08, paras. 390, 396-97; see also GTE ONA, 11 FCC Rcd. at 1402-03, para. 30.

<sup>115</sup> Computer III FNPRM 1998, 13 FCC Rcd. at 6087, para.
84

<sup>116</sup> *Id.* at 6051, para. 13.

<sup>117</sup> Id. at 6095-96, 6098, paras. 103, 108; see also GTE ONA, 11 FCC Rcd. at 1404, para. 32; see Computer III Remand 1995, 10 FCC Rcd. at 8377-78, para. 27.

### A. Discrimination

Beyond the specific anti-discrimination provisions in *Computer III* that apply to BOCs, all carriers are subject to the anti-discrimination provisions in Section 202 of the Communications Act.<sup>118</sup> One of the essential characteristics of being a common carrier is that the carrier must provide services to all end users on the same terms and conditions; the carrier is not permitted to select to whom it will and will not provide service. Specifically, the carrier cannot select to provide service to its affiliates and refuse service to those not affiliated with the carrier.

### B. Bundling

### 1. *CPE*

Promulgated as a part of *Computer II*, the Commission's bundling rules apply to all carriers all the time. These rules prohibit carriers from bundling customer premises equipment (i.e., modems) with the provision of telecommunications services.<sup>119</sup> Note that this rule restricts the conduct of a carrier, but not necessarily the conduct of an affiliated separate subsidiary (i.e., bell.net) of the carrier.<sup>120</sup>

### (b) Charges or services included

Charges or services, whenever referred to in this chapter, include charges for, or services in connection with, the use of common carrier lines of communication, whether derived from wire or radio facilities, in chain broadcasting or incidental to radio communication of any kind.

### (c) Penalty

Any carrier who knowingly violates the provisions of this section shall forfeit to the United States the sum of \$6,000 for each such offense and \$300 for each and every day of the continuance of such offense.

Id. at § 202.

### 2. Basic and Enhanced Services

All "carriers that own common carrier transmission facilities and provide enhanced services must unbundle basic from enhanced services and offer transmission capacity to other [ESPs] under the same tariffed terms and conditions under which they provide such services to their own enhanced service operations." 121

# C. Customer Proprietary Network Information ("CPNI")

A significant concern is the situation where nonaffiliated ISPs order services from their telecommunications supplier BOC and, in the same act, provide sensitive proprietary customer information to their competitor BOC. The Computer Inquiries recognized the problem that BOCs can use information gathered as a supplier to unfairly compete with ESP competitors. Thus, the Commission created restrictions on the ability of the BOC to use that information. In Computer III, the Commission required BOCs and GTE to:

(1) make CPNI available, upon customer request, to unaffiliated enhanced service vendors, on the same terms and conditions that are available to their own enhanced services personnel; (2) limit their enhanced

<sup>118 47</sup> U.S.C. § 202 (Supp. IV 1999). The section reads: Discriminations and preferences

<sup>(</sup>a) Charges, services, etc.

It shall be unlawful for any common carrier to make any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services for or in connection with like communication service, directly or indirectly, by any means or device, or to make or give any undue or unreasonable preference or advantage to any particular person, class of persons, or locality, or to subject any particular person, class of persons, or locality to any undue or unreasonable prejudice or disadvantage.

<sup>119 47</sup> C.F.R. § 64.702(e) ("Except as otherwise ordered by the Commission, after March 1, 1982, the carrier provision of customer-premises equipment used in conjunction with the interstate telecommunications network shall be separate and distinct from provision of common carrier communications services and not offered on a tariffed basis.").

Note that these rules are currently the subject of an open proceeding before the FCC. See generally In re Review Of Customer Premises Equipment And Enhanced Services Unbundling Rules In the Interexchange, Exchange Access and Local Exchange Markets, Notice of Proposed Rulemaking, 13 FCC Rcd. 21,531 (1998) [hereinafter CPE Review].

In re Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), Final Decision, 77 F.C.C.2d 384, 474–75, para. 231 (1980); Frame Relay, 10 FCC Rcd. at 13,719, para. 13; see also CPE Review, 13 FCC Rcd. at 21,549, para. 33. Note that this requirement is currently the subject of several open proceedings. The FCC has asked whether this unbundling obligation should be expanded from coverage of "enhanced services" to include all "information services." Computer III FNPRM 1998, 13 FCC Rcd. at 6067, para. 42. The FCC also has asked whether this obligation ought to be removed in the context of "interstate, domestic, interexchange services offered by nondominant interexchange carriers." CPE Review, 13 FCC Rcd. at 21,550, para. 35.

services personnel from obtaining access to a customer's CPNI if the customer so requests; and (3) notify [multilane] business customers annually of their CPNI rights. 122

In addition, the Commission prohibited BOCs and GTE from providing to its affiliated ESP "any customer proprietary information unless such information is available to any member of the public on the same terms and conditions." <sup>123</sup>

In 1996, Congress passed the new *Privacy of Customer Information* provision, codified as Section 222 of the Communications Act.<sup>124</sup> Section 222 contains the restrictions on the use of customer information by all carriers, not just BOCs. This includes Customer Proprietary Network Information and Carrier Information.

The FCC concluded that Section 222 replaced "the *Computer III* CPNI framework in all material respects," 125 however, the *CPNI Order* where the FCC made that conclusion was vacated by a federal appellate court. 126

Section 222 defines Customer Proprietary Network Information as:

(A) information that relates to the quantity, technical configuration, type, destination, and amount of use of a telecommunications service subscribed to by any customer of a telecommunications carrier, and that is made available to the carrier by the customer solely by virtue of the carrier-customer relationship; and (B) information contained in the bills pertaining to telephone exchange service or telephone toll service received by a customer of a carrier; except that such term does not include subscriber list information.<sup>127</sup>

Subscriber list information, essentially the information listed in a phone book, is defined as

[A]ny information—

(A) identifying the listed names of subscribers of a carrier and such subscribers' telephone numbers, addresses, or primary advertising classifications (as such

classification are assigned at the time of the establishment of such service), or any combination of such listed names, numbers, addresses, or classifications; and (B) that the carrier or an affiliate has published, caused to be published, or accepted for publication in any directory format. 128

### According to Section 222:

[e]xcept as required by law or with the approval of the customer, a telecommunications carrier that receives or obtains customer proprietary network information by virtue of its provision of a telecommunications service shall only use, disclose, or permit access to individually identifiable customer proprietary network information in its provision of (A) the telecommunications service from which such information is derived, or (B) services necessary to, or used in, the provision of such telecommunications service, including the publishing of directories. 129

In other words, information gathered in order to provide telecommunications service can be used only for the provision of that service. A carrier could not use the information it has gathered from providing telephone service in order to market Internet services. The key exception is whether the carrier has the approval of the customer to use that information for other purposes.

It is important to understand that these rules only apply where information is derived from the provision of telecommunications services. It does not apply where the LEC is providing nontelecommunications services such as Internet services.<sup>131</sup>

Many ISPs are also CLECs. Another portion of Section 222 addresses customer information in the context of intercarrier relations. It states:

A telecommunications carrier that receives or obtains proprietary information from another carrier for purposes of providing any telecommunications service shall use such information only for such purpose, and

BOC's Joint Petition, 10 FCC Rcd. at 13,765, para. 46; see also Ameritech's CEI Plan, 13 FCC Rcd. at 95-96, para. 41; GTE ONA, 11 FCC Rcd. at 1408-09, para. 41; Bell Atlantic's CEI Plan, 11 FCC Rcd. at 985, para. 1; ONA Review, 4 FCC Rcd. at 20-21, 209-33, paras. 25, 398-447.

<sup>123 47</sup> C.F.R. § 64.702(d)(3), repealed by In re Implementation of the Telecommunications Act of 1996; Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information; Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended, Second Report And Order And Further Notice Of Proposed Rulemaking, 13 FCC Rcd. 8061, 8067, para. 4 (1998) [hereinafter CPNI].

<sup>&</sup>lt;sup>124</sup> 47 U.S.C. § 222 (1994 & Supp. IV 1999).

<sup>125</sup> *CPNI*, 13 FCC Rcd. at 8187–88, para. 180.

<sup>126</sup> U S West, Inc. v. Federal Communications Commission, 182 F.3d 1224 (10th Cir. 1999), cert. denied sub. nom Competition Policy Inst. v. U S West, Inc., 120 S. Ct. 2215

<sup>(2000).</sup> 

<sup>&</sup>lt;sup>127</sup> 47 U.S.C. § 222(f)(1).

<sup>&</sup>lt;sup>128</sup> 47 U.S.C. § 222(f)(3).

<sup>129 47</sup> U.S.C. § 222(c)(1).

<sup>130</sup> See CPNI, 13 FCC Rcd. at 8064–65, paras. 2–3; In re Implementation of the Telecommunications Act of 1996 Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information, Order on Reconsideration and Petitions for Forbearance, 14 FCC Rcd. 14,409, 14,434–35, paras. 46–47 (1999) [hereinafter CPNI Reconsideration] (concluding that the provision of Internet services is not necessary to the provision of telecommunications service).

<sup>131</sup> See CPNI Reconsideration, 14 FCC Rcd. at 14,492–93, para. 159; In re Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information, Order, 13 FCC Rcd. 12,390, 12,391, para. 1 (1998).

shall not use such information for its own marketing efforts <sup>132</sup>

In 1998, the Commission promulgated rules implementing Section 222 of the Communications Act.<sup>133</sup> U.S. West filed an appeal concerning the FCC rules with the Tenth Circuit Court of Appeals, which vacated the FCC rules as a violation of the First Amendment.<sup>134</sup>

Where does this leave CPNI? The FCC rules implementing Section 222 have been vacated; Section 222 has not been vacated and remains binding. Furthermore, since the FCC's Section 222 rules were vacated, the previous FCC's Computer III CPNI rules remain in place.

### D. Network Information Disclosure

Computer II and Computer III articulated requirements for the disclosure of network information by BOCs.<sup>135</sup> These requirements have been superceded by the 1996 Act.<sup>136</sup> The regulations implementing the new statutory requirements can be found at 47 C.F.R. §§ 51.325–51.335.

In sum, these rules require all incumbent local exchange carriers<sup>137</sup> to provide public notice regarding any network changes that affect a competing service provider's (including an information service provider<sup>138</sup>) performance or ability to provide service, or will affect the ILEC's interoperability with other service providers.<sup>139</sup> Until the ILEC has disclosed this information publicly, it

may not disclosure this information to others, particularly its own affiliates.<sup>140</sup> The rules set forth requirements for the content of the notice,<sup>141</sup> the methods of notice<sup>142</sup> and the timing of notice.<sup>143</sup> Information about DSL readiness of the network would fall within the Network Information Disclosure rules.

### E. Cross Subsidization

Pursuant to the Commission's "Allocation of Cost" rules, a carrier may not use services not subject to competition to subsidize services that are subject to competition. In other words, a carrier could not use noncompetitive local telephone revenues to subsidize its Internet access services.<sup>144</sup>

### F. Accounting Safeguards

Carriers are subject to a series of accounting safeguards, which can be found in Subpart I, Part 64 of Title 47 of the Code of Federal Regulations. The rules require that the carriers be subject to annual independent audits to ensure, for example, that they are not improperly cross-subsidizing their services. 145 The final reports of these independent audits are publicly available and can be obtained by contacting the Accounting Safeguards Division of the FCC's Common Carrier Bu-

<sup>&</sup>lt;sup>132</sup> 47 U.S.C. § 222(b).

<sup>133</sup> See 47 C.F.R. § 64.2005 (1999). See generally CPNI, 13 FCC Rcd. 8061.

<sup>134</sup> US West, Inc., 182 F.3d at 1240.

<sup>135</sup> See 47 C.F.R. § 64.702(d)(2) (noting network information disclosure requirements for BOCs providing enhanced services through separate subsidiaries); Computer III Order 1999, 14 FCC Rcd. at 4314–18, paras. 39–43; Ameritech's CEI Plan, 13 FCC Rcd. at 96–97, para. 43; ONA Review, 4 FCC Rcd. at 252, para. 489. See generally BOC's Joint Petition, 10 FCC Rcd. 13,758; Bell Atlantic's CEI Plan, 11 FCC Rcd. 985.

See Computer III Order 1999, 14 FCC Rcd. at 4292, para.
 4; 47 U.S.C. § 251(c) (1994 & Supp. IV 1999) states:

In addition to the duties contained in subsection (b), each incumbent local exchange carrier has the following duties . . . (5) Notice of Changes. The duty to provide reasonable public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks.

<sup>47</sup> U.S.C. § 251(c).

<sup>137</sup> An ILEC is defined as follows:

For purposes of this section, the term 'incumbent local exchange carrier' means, with respect to an area, the local exchange carrier that—

<sup>(</sup>A) on February 8, 1996, provided telephone exchange service in such area; and

<sup>(</sup>B) (i) on February 8, 1996, was deemed to be a member of the exchange carrier association pursuant to section 69.601(b) of the Commission's regulations (47 C.F.R. § 69.601(b)); or (ii) is a person or entity that, on or after February 8, 1996, became a successor or assign of a member described in clause (i).

<sup>47</sup> U.S.C. § 251(h).

<sup>138</sup> See 47 C.F.R. § 51.325(d) (1999).

<sup>139</sup> See id. at § 51.325(a).

<sup>&</sup>lt;sup>140</sup> See id. at § 51.325(c).

<sup>141</sup> See id. at § 51.327 (1999).

<sup>142</sup> See id. at § 51.329 (1999).

<sup>&</sup>lt;sup>143</sup> See id. at §§ 51.331-51.333 (1999).

<sup>144</sup> See id. at § 64.901(c) ("A telecommunications carrier may not use services that are not competitive to subsidize services subject to competition. Services included in the definition of universal service shall bear no more than a reasonable share of the joint and common costs of facilities used to provide those services."); see also 47 U.S.C. § 254(k) (articulating the same restriction).

<sup>145</sup> See Comprehensive Review of the Accounting Requirements and ARMIS Reporting Requirements for Incumbent Local Exchange Carriers: Phase I, 65 Fed. Reg. 16,328, 16,335 (Mar. 28, 2000) (to be codified at 47 C.F.R. § 64.904).

reau.<sup>146</sup> Information about the common carriers' accounting can be found in the Commission's ARMIS database,<sup>147</sup> publicly available on the FCC website. Pursuant to Section 64.903, the Commission has a cost allocation manual indicating how different common carrier costs should be allocated between regulated and unregulated services.<sup>148</sup>

# VII. THE TELECOMMUNICATIONS ACT OF 1996: SECTION 272

Section 272 of the 1996 Act anticipated the entrance of BOCs into interLATA (long-distance) services, including Internet services. In order to safeguard the competitive nature of the market-place, Congress imposed an interLATA safeguard for the provision of "information services." <sup>149</sup> In Section 272, Congress stated that BOCs could only enter interLATA information services

<sup>146</sup> Accounting Safeguards Division, Common Carrier Bureau, Federal Comm. Comm'n, *at* http://www.fcc.gov/ccb/asd (last updated Sept. 1, 2000).

147 COMMON CARRIER BUREAU, FEDERAL COMM. COMM'N, AUTOMATED REPORTING MANAGEMENT INFORMATION SYSTEM, at http://www.fcc.gov/ccb/armis/ (last updated July 20, 2000) (containing "financial, operational, service quality, and network infrastructure data from the largest local exchange carriers").

148 See Comprehensive Review of the Accounting Requirements and ARMIS Reporting Requirements for Incumbent Local Exchange Carriers: Phase I, 65 Fed. Reg. at 16,335 (Mar. 28, 2000) (to be codified at 47 C.F.R. § 64.903).

149 In re Implementation of Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended, First Report and Order and Notice of Proposed Rulemaking, 11 FCC Rcd. 21,905, 21,961–62, para. 115 (1996), overruled by, In re Implementation of the Telecommunications Act of 1996; Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information; Implementation of the Non-Accounting Safeguards of Section 271 and 272 of the Communications Act of 1934, as Amended, Second Report and Order and Further Notice of Proposed Rulemaking, 13 FCC Rcd. 8061 (1998) [hereinafter Section 272 Order].

[T]he term 'interLATA information service' refers to an information service that incorporates as a necessary, bundled element an interLATA telecommunications transmission component, provided to the customer for a single charge . . . We further conclude that a BOC provides an interLATA information service when it provides the interLATA telecommunications transmission component of the service either over its own facilities, or by reselling the interLATA telecommunications services of an interexchange provider.

Id.

through a separate subsidiary (much like the *Computer II* regime).<sup>150</sup> This restriction applied to both in-region and out-of-region interLATA service.<sup>151</sup> It did not apply to intraLATA service and it did not alter the application of *Computer III* to information services.<sup>152</sup> InterLATA information services originating outside a BOC's region could be provided immediately after the passage of the 1996 Act. InterLATA information services that originate within the BOC's region could not be provided until that BOC's Section 271 application has been approved.<sup>153</sup>

This restriction expired on February 8, 2000, pursuant to the "sunset" provision of the law. 154 Nevertheless, BOCs may not provide any interLATA services until their Section 271 applications are approved and then may only provide interLATA telecommunications services through a separate subsidiary for a period of three years. 155

requirements of section 251(c) may not provide any service described in paragraph (2) unless it provides that service through one or more affiliates that are separate from any operating company entity that is subject to the requirements of section 251(c); and meet the requirements of subsection (b). The services for which a separate affiliate is required by paragraph (1) are . . . InterLATA information services, other than electronic publishing (as defined in section 274(h)) and alarm monitoring services (as defined in section 275(e) of this title).

Id; see also Section 272 Order, 11 FCC Rcd. at 21,933, para. 57 ("[A] BOC would be required to obtain section 271 authorization prior to providing, in-region, the interLATA telecommunications transmission component of an interLATA information service.").

In re Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended, Third Order on Reconsideration, 14 FCC Rcd. 16,299, 16,305–06, para. 8 (1999) [hereinafter Section 272 Third Order] ("We affirm the conclusion in the Non-Accounting Safeguards Order that section 272(a)(2)(C) does not exclude out-of-region interLATA information services' from the separate affiliate requirement."); see also Section 272 Order, 11 FCC Rcd. at 21,931, para. 51 ("We further stated that, where the 1996 Act draws distinctions between in-region and out-of-region 'interLATA services,' these distinctions do not apply to interLATA information services.").

 $^{152}$   $\,$  See Computer III FNPRM 1998, 13 FCC Rcd. at 6054, para. 20.

153 See Section 272 Order, 11 FCC Rcd. at 21,946, para. 85.

154 See 47 U.S.C. § 272(f)(2); see also In re Request for Extension of the Sunset Date of the Structural, Nondiscrimination, and Other Behavioral Safeguards Governing Bell Operating Company Provision of In-Region, InterLATA Information Services, Order, 15 FCC Rcd. 3267, 3268, para. 3 (2000) (denying a petition by CIX and ITAA requesting that the restriction be extended).

155 See 47 U.S.C. § 271 (Supp. IV 1999).

 $<sup>^{150}</sup>$  See 47 U.S.C. § 272(a) (Supp. IV 1999). The section states that:

<sup>[</sup>a] Bell operating company (including any affiliate) which is a local exchange carrier that is subject to the

tion. 162

### VIII. ENFORCEMENT

The FCC has promised to vigorously enforce *Computer III* but has made clear that it is dependent upon the market players to bring issues to the attention of the FCC.

We believe that competitive ISPs will themselves monitor CEI compliance vigilantly, and will call the Commission's attention to any failure by a BOC to follow through on its CEI responsibilities . . . The Commission will not hesitate to use its enforcement authority, including the Accelerated Docket or revised complaint procedures, to review and adjudicate allegations that a BOC is falling short of fulfilling any of its CEI obligations. <sup>156</sup>

Section 207 of the Communications Act<sup>157</sup> gives individuals the right to file formal complaints in a federal district court or before the Commission.<sup>158</sup> In these proceedings, parties act according to their role as plaintiff and are therefore responsible for prosecuting their own case. Proceedings before federal district court must comply with the Federal Rules of Civil Procedure. Proceedings before the Commission are less for-

mal and must comply with Commission rules. 159 More information concerning filing formal com-

plaints before the Commission can be found on

the "Complaints About Telephone-Related Issues"

web page.160 Parties may also consider whether

their cases are eligible for rapid treatment under

the Commission's accelerated dockets. Section

209 of the Communications Act authorizes the

award of monetary damages for violations of the

Communications Act. 161 Parties who elect to

bring their own complaints generally must do so

within two years of the date of the rule viola-

tention of the Commission and have the Commis-

sion investigate the claim. Issues can be brought

to the attention of the Investigations and Hear-

ings Division of the Enforcement Bureau. 163 If the

Division believes that a violation may have oc-

Another alternative is to bring issues to the at-

complaint and an online form on which a complaint can be filed).

curred, it can investigate and the FCC may pursue enforcement action on its own.<sup>164</sup>

<sup>156</sup> Computer III Order 1999, 14 FCC Rcd. at 4300, para. 15.

<sup>&</sup>lt;sup>157</sup> 47 U.S.C. § 207 (Supp. IV 1999).

The choice of law is mutually exclusive. In addition, it is possible to bring some complaints to state public utility commissions. See NARUC, STATE PUBLIC UTILITIES COMM'NS' WEBSITES, at http://www.naruc.org/Stateweb.htm (last visited Oct. 10, 2000) (containing links to the public service commissions' websites for each state).

<sup>159</sup> See Establishment of the Enforcement and Consumer Information Bureaus, 64 Fed. Reg. 60,715, 60,725–26 (1999) (to be codified at 47 C.F.R. §§ 1.720–1.736).

<sup>160</sup> COMMON CARRIER BUREAU, FEDERAL COMM. COMM'N, COMPLAINTS ABOUT TELEPHONE-RELATED ISSUES, *at* http://www.fcc.gov/ccb/enforce/index-complaints.html (last modified Jan. 15, 1999) (containing information on how to file a

<sup>&</sup>lt;sup>161</sup> 47 U.S.C. § 209 (Supp. IV 1999).

<sup>162</sup> See 47 U.S.C. § 415(b) (Supp. IV 1999) ("All complaints against carriers for the recovery of damages not based on overcharges shall be filed with the Commission within two years from the time the cause of action accrues, and not after, subject to subsection (d) of this section.").

<sup>&</sup>lt;sup>163</sup> Investigations and Hearings Division, Enforcement Bureau, Federal Comm. Comm'n, *at* http://www.fcc.gov/eb/ihd/ (last modified May 8, 2000).

<sup>164</sup> Id. However, the aggrieved party will not have control of the prosecution and the Division is under no obligation to provide the aggrieved party with updates on the status of the investigation.