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

In the Manner of Communications Assistance for Law Enforcement Act and Broadband Access Services	DA No. 04-295 RM 10865

COMMENTS OF VERIZON ON COMMISSION'S NOTICE OF PROPOSED RULEMAKING AND DECLARATORY RULING

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Verizon[1/] recognizes the importance of the Communications Assistance for Law Enforcement Act ("CALEA") and is committed to meeting its obligations under it. Verizon has demonstrated this commitment through a long history of working with law enforcement on CALEA issues and its role as an industry leader in facilitating and implementing CALEA solutions for circuit-switched services. For example, Verizon helped to facilitate the FBI's buy-outs of CALEA capabilities from Lucent and AGCS and met its compliance obligations for circuit-switched services in accordance with the flexible deployment plan.

Verizon remains committed to complying expeditiously with the capability requirements of section 103 of CALEA for packet-mode services. Notwithstanding the continuing uncertainty concerning the precise content or scope of CALEA's requirements as applied to those services, Verizon is working with other industry members to develop industry standards and with its vendors to develop CALEA solutions for these services. For example, Verizon's RFP for softswitches to provide VoIP services included a requirement that the equipment comply with CALEA. Consistent with that RFP, Verizon's agreement with Nortel to provide softswitches for this service includes the provision of CALEA capabilities. Verizon also has worked with standards organizations and its vendors to determine how to meet CALEA requirements and continues to work actively on the development of applicable standards and CALEA solutions for other types of packet-mode technologies.

Consistent with this commitment to CALEA and the needs of law enforcement, Verizon supports the Commission's tentative conclusions that whether providers of VoIP or broadband access services are "telecommunications carriers" within the meaning of CALEA is independent

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1/ This petition is filed on behalf of the entities affiliated with the Verizon companies listed in Attachment A.

of their classification under the Communications Act. As the Commission reasons, the CALEA definition of "telecommunications carrier" is different from and broader than the Communications Act definition of that term. In particular, CALEA's "substantial replacement" provision permits the Commission to deem a service subject to CALEA when an entity provides a switching or transmission service that is a replacement for a substantial portion of the local telephone exchange service and the Commission determines it is in the public interest to deem the entity to be a telecommunications carrier for purposes of CALEA.

VoIP services readily meet CALEA's "substantial replacement" test. Such services necessarily involve "switching or transmission" and are a replacement for voice phone calls that have traditionally been provided using local telephone exchange service. And requiring such services to comply with CALEA will serve the public interest because otherwise terrorists and other criminals could evade law enforcement by using voice services that provide the same functionality as local telephone exchange service but do not have to be CALEA-compliant. Thus, any VoIP provider that uses an application server or network to provide the service should be subject to CALEA. This server/network test is more precise than the "managed"/"non-managed" distinction that the Commission suggests. *NPRM* ¶¶ 56, 58.

The Commission should also make clear that any obligations imposed by CALEA on broadband access services apply equally to *all* competing providers of broadband access services, regardless of their regulatory classification for purposes of the Communications Act. Any other conclusion would make little sense: terrorists and other criminals should not be able to avoid surveillance simply by switching their high speed service from DSL to cable modem service, for example. Moreover, subjecting only a limited class of providers of broadband access

services to CALEA would create artificial market distortions by imposing compliance costs on some providers of an identical functionality, but not on others.

With respect to the timeline for compliance and penalties for non-compliance, the Commission should adopt a balanced approach that provides the appropriate incentives for carriers to work expeditiously to come into compliance, while at the same time recognizing that the development of CALEA solutions is complex and will take time. In striking this balance, the Commission must comply with the statutory "reasonably achievable" standard. 47 U.S.C. §§ 1006, 1008. Implicit in this balance is the reality that a "one-size-fits-all" approach is not appropriate. While compliance may be reasonably achievable in the near future for some services, for broadband access services, compliance almost certainly will not be achievable within 90 days after the Commission issues its order in this proceeding. The Commission's compliance deadlines and petition procedures must account for these realities and provide carriers relief when compliance is not "reasonably achievable."

Providers' obligations with respect to call-identifying information in the context of packet-based services remains a complex issue. Indeed, the Commission's attempt to identify the categories of information that constitute call-identifying information only serves to demonstrate the difficulty of the issues presented. The Commission correctly concludes that whether call-identifying information is "reasonably available" depends on whether providing it would require the provider to significantly modify its network. However, the details of what constitutes call-identifying information in packet networks, and which particular pieces of call-identifying information each type of entity subject to CALEA must provide, is too technical to be decided by the Commission in this proceeding. The Commission should instead leave the technical details to the standards process. And to the extent the Commission believes that

Trusted Third Parties are an appropriate method of extracting call-identifying information, it should – and indeed must, consistent with CALEA – make that approach optional, and not require it of any carrier.

Finally, the Commission should not mandate a particular means for carriers to recover their costs of CALEA compliance but rather should permit them to choose the most appropriate method given their particular circumstances. Carriers subject to price cap regulation, for example, should be entitled to flexibility in recovering their costs, for example, by filing a tariff with the Commission to recover CALEA costs through a competitively-neutral federal surcharge that applies to end users, as well as wholesale customers. Furthermore, where carriers incur particular costs to accommodate specific law enforcement requests, they should be permitted to pass those costs along to law enforcement.

I. Services to which CALEA Applies

Verizon agrees with the Commission's tentative conclusion that the CALEA definition of "telecommunications carrier" is different from and broader than the Communications Act definition of that term and that whether a particular service falls within Title I or Title II is independent of the applicability of CALEA to that service. This conclusion is consistent with the plain language of the statute and is also the only reading of CALEA that is consistent with Congress's stated intent "to preserve the government's ability, pursuant to court order or other lawful authorization, to intercept communications involving advanced technologies such as digital or wireless transmission modes."[2/]

[2/] *See* House Judiciary Comm., Communications Assistance for Law Enforcement Act of 1994, H.R. Rep. 103-827(I) at 3502 (1994) (Summary and Purpose) *reprinted in* 1994 U.S.C.C.A.N. 3489 ("House Report").

As the Commission notes, CALEA's definition of "telecommunications carrier" is distinct from the corresponding definition in the Communications Act. Under CALEA, a provider is a "telecommunications carrier" if it (1) provides switching or transmission of wire or electronic communications as a common carrier *or* (2) is "engaged in providing wire or electronic communication switching or transmission service" that is a "replacement for a substantial portion of the local telephone exchange service" and the Commission finds it in the public interest to deem the provider of such a service subject to CALEA.[3] Under the Communications Act, by contrast, a "telecommunications carrier" is the provider of "telecommunications service," defined in the Act as "the offering of telecommunications for a fee directly to the public . . . regardless of the facilities used."[4] The Communications Act has no analogue to the second prong of the CALEA definition.

As a result of the plain difference in the statutory text, the Commission concluded in the *Second Report and Order* that "CALEA's 1994 definition of the term 'telecommunications carrier' differs from the definition of that term in the Telecommunications Act of 1996."[5/] As the Commission reasoned, CALEA's definitions were not modified by the 1996 Act: the 1996 Act provides that "this Act and the amendments made by this Act shall not be construed to modify, impair or supersede Federal, State, or local law unless expressly so provided in such Act or amendments," and nothing in the 1996 Act expressly modifies, impairs, or supersedes the

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[3] 47 U.S.C. § 1001(8)(A), (B)(ii).

[4] 47 U.S.C. § 153(44), (46).

[5/] Second Report and Order, *Communications Assistance for Law Enforcement Act*, 15 FCC Rcd 7105, 7110 ¶ 8 (1999) ("*Second Report and Order*").

CALEA definitions.[6] Accordingly, the Commission rightly found, "the entities and services subject to CALEA must be based on the CALEA definition . . . *independently of their classification for the separate purposes of the Communications Act*."[7] Indeed, interpreting the definitions of "telecommunications carrier" under the two statutes to be identical would render the second prong of the CALEA definition superfluous, a violation of basic canons of statutory construction.[8]

It is also important to note that, under the definitions in CALEA, all carriers that provide the same or similar functions must be treated the same in terms of their CALEA obligations. Thus, while the NPRM appears to suggest that, once a carrier is deemed a common carrier, all the services it provides are subject to CALEA,[9] that would be inconsistent with the statute. Common carriers are subject to CALEA only to the extent they are acting as telecommunications carriers under the CALEA definition. The statutory definition of "telecommunications carrier" expressly provides that an entity is not a "telecommunications carrier" for purposes of CALEA

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[6] *Id.* at 7110, 7112 ¶¶ 8, 13.

[7] *Id.* at 7112 ¶ 13 (emphasis added). To be sure, the Commission noted in dicta in a 1999 Order that it expects that "in *virtually* all cases [] the definitions of the two Acts will produce the same results[.]" *Second Report and Order* at 7112 ¶ 13 (emphasis added). But that statement merely acknowledges the fact that, at the time of the Commission's statement, the large majority of carriers covered by CALEA were also telecommunications carriers under the Communications Act. The marketplace and technology clearly have evolved significantly since then, and the second prong of the CALEA definition is intended to take account of such evolution.

[8] *See, e.g., Doe v. Chao*, 124 S. Ct. 1204, 1214 (2004) ("It is a cardinal principle of statutory construction that a statute ought, upon the whole, to be so construed that, if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant.") (internal quotation and citation omitted).

[9] Notice of Proposed Rulemaking and Declaratory Ruling, *Communications Assistance for Law Enforcement Act and Broadband Access and Services*, 19 FCC Rcd 15676, FCC 04-182. ¶ 39 (rel. Aug. 9, 2004) ("*NPRM*").

"insofar as [it is] engaged in providing information services."[10] The Commission should thus clarify that, to the extent a common carrier provides services that fall within the "information services" exception to CALEA, those services are exempt from CALEA just as they would be for any other provider.

A. Providers of VoIP Should Be Subject to CALEA.

Based on the statutory language and purposes of CALEA, the Commission is correct in its tentative conclusion that VoIP services are generally subject to CALEA under the substantial replacement portion of the definition of telecommunications carrier. Consistent with this conclusion, Verizon already has been working to provide CALEA capabilities in connection with its own network-based VoIP services. For example, Verizon's RFP for the softswitches that will be used to provide these services included a requirement that the equipment comply with CALEA requirements. Verizon's agreement with Nortel to provide softswitches for this service includes the provision of CALEA capabilities.

VoIP providers satisfy each of the requirements of the substantial replacement prong of the definition of telecommunications carrier under CALEA. First, VoIP providers, whether network-based or at the application layer, offer a "service" that necessarily involves "switching or transmission" in order to function. Under CALEA, an entity need not actually perform the transmission or switching itself, but instead merely needs to be engaged in *providing* an electronic communication *service* that involves switching or transmission, regardless of whether it or some other entity performs the actual transmission or switching.

Second, VoIP is a replacement for voice phone calls, a core function of the local telephone exchange service. The Commission correctly reasons that the substantial replacement

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[10] 47 U.S.C. § 1001(8)(C)(i).

provision imposes a functional test – a service is a "substantial replacement" for circuit-switched telephone service if it replaces a substantial portion of the functionalities of local telephone exchange service. *NPRM* ¶ 44. Under this analysis, whether a service has achieved a particular market penetration or is a complete economic substitute for "plain old telephone service" is irrelevant; a terrorist or other criminal will not wait to use a new service until it has reached some threshold market share. Rather, the test is whether a service is a replacement for a "substantial portion" of the "local exchange *service*" such that a criminal or terrorist might use it instead of (*i.e.*, as a replacement for) local exchange service. VoIP satisfies this test because it allows users to make and receive voice calls and therefore is a replacement for the central function of local exchange service.

Third, finding VoIP providers to be subject to CALEA is in the public interest. As the Commission tentatively concludes, this determination should be based on the three factors listed in the House Report – whether a decision that a service falls within CALEA would promote competition, encourage the development of new technologies, and protect public safety and national security. *NPRM* ¶ 45. These factors effectively balance CALEA's goals of ensuring law enforcement access to communications and promoting the development of new technology. If VoIP providers were not deemed telecommunications carriers under CALEA, an ever-growing share of voice communications would be exempt from CALEA and therefore potentially outside the scope of law enforcement surveillance. Further, finding VoIP providers to be subject to CALEA would "promote competition" by imposing CALEA obligations on all providers of comparable voice services, rather than creating competitive distortions by requiring only some providers to incur the costs of complying.

In bringing VoIP services within CALEA, the Commission should make clear that CALEA obligations, including the obligation to provide call-identifying information, apply to voice over IP service providers even if they do not control the physical network over which VoIP traffic rides. Without such a rule, law enforcement may not be able to obtain access to the voice traffic. For example, the provider of a transport service, such as DSL or cable modem, will be switching and forwarding data based on information at layers one (physical), two (data-link), or three (network) of the protocol stack.[11/] If a non-affiliated provider of VoIP service ran over that transport, the transport provider not would not normally process or interpret higher layers, including layers five through seven, the session through application layers where the voice service is provided. Thus, while the transport provider might be able to provide law enforcement with the customer's entire packet stream using existing equipment that supports the transport provider's service, it will often be unaware of what type of communication and information (*e.g.*, voice, data, content, signaling) is being transmitted. In such cases, it is not clear how or if the transport provider could filter the packet stream to isolate the information relating to a voice over IP communication. By contrast, the voice over IP application provider – at least when it processes, manages, or otherwise handles the communications through its servers or network – is in a better position to isolate and interpret the relevant information without requiring significant modifications.

For these reasons, the Commission's proposed "managed v. non-managed" test, *NPRM* ¶¶ 56, 58, does not properly capture the entities that should and should not be subject to CALEA.

[11/] Networks are often organized into protocol layers to reduce design complexity. Each protocol layer has a particular function(s) needed to transmit data. Network equipment typically operates at a subset of layers, whereas end-systems or hosts process all seven layers. A standard model called the ISO (International Standards Organization) OSI (Open Systems Interconnection) Reference Model consists of seven layers, which are as follows (starting from layer 1): physical, data link, network, transport, session, presentation, and application.

CALEA should apply to all VoIP services that involve the use of either application servers or networks, regardless of whether that service is "managed" or whether the provider labels it as peer-to-peer. Providers that use such servers or networks "provide an electronic communication switching or transmission service that replaces a substantial portion of local exchange service for their customers in a manner functionally the same as POTS service." *NPRM* ¶ 56. Moreover, the public interest in subjecting VoIP providers to CALEA does not change depending on whether the service is "managed."

B. Any CALEA Obligations that Apply to Broadband Access Services Should Apply Equally to All Providers of Such Services Regardless of Their Classification for Regulatory Purposes under the Communications Act.

As explained above, the question whether broadband access services should be classified as common carriers under Title II or as Title I services for regulatory purposes does not affect the CALEA analysis. The Commission should make clear that any obligations imposed by CALEA apply equally to *all* competing providers of broadband access services, regardless of their regulatory classification for purposes of the Communications Act. The Commission has already concluded that DSL is subject to CALEA.[12] There is no reason that DSL should be treated differently from other broadband access services, including cable modem and satellite. Indeed, it would make no policy sense to draw a distinction between DSL and other types of broadband access. Such a decision would enable individuals to avoid electronic surveillance simply by virtue of what broadband access service they choose. Requiring CALEA compliance for DSL but not for cable modem or other broadband access services also would cause competitive distortions. Providers such as Verizon would incur costs to comply with CALEA, and

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[12] *Second Report and Order* at 7120 ¶ 27.

necessarily pass such costs to its customers, while its competitors deploying cable modem and other broadband services would incur no such costs.

Nothing about the "information service" exception to CALEA changes the need to treat all broadband access services equally under the statute. The fact that some such services might be information services for purposes of the Communications Act is irrelevant because CALEA contains its own definitions of the relevant terms. And nothing in CALEA's language or underlying purposes supports treating some providers of broadband access services as "telecommunications carriers," but not others. If DSL is a "substantial replacement" for local exchange service for purposes of CALEA, then that conclusion also applies to other forms of broadband access services even if those services are information services for purposes of the Communications Act. This interpretation does not, of course, render the information services exemption of CALEA meaningless. To the contrary, as is clear from CALEA's legislative history, at least some applications that "ride over" the underlying broadband transmission – and that, unlike VoIP, do not fall within CALEA's definition of telecommunications – may be information services under CALEA.[13/] For such services, the application provider has no CALEA obligation (though it still has a duty under Title III and other surveillance statutes to cooperate with law enforcement).

To the extent the Commission concludes that broadband access services fall within CALEA, it should recognize that, in many cases, the underlying network provider should not be the only or first entity to which law enforcement should look for assistance. CALEA was "not intended to guarantee 'one-stop shopping' for law enforcement."[14/] Instead, CALEA imposes

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13/ *See, e.g.*, House Report at 3500.

14/ *See id.* at 3502.

obligations on individual service providers only with respect to information to which a carrier has reasonable access and the ability to interpret in the context of the service being provided, and that necessarily depends on the particular service, the applications involved, the facilities used, and the network architecture.[15/]

In many cases, the underlying network provider will not be in a position to provide law enforcement with the information it needs, and thus to the extent that a CALEA obligation applies to broadband access services, it must apply to all entities that play a role in providing services that are subject to CALEA. For example, Verizon does not normally interpret information above layer 2 where it provides wholesale broadband access service; in such situations, law enforcement would have to determine who the wholesale customer is, and go to that customer to interpret the target's information above layer 2. In the case where Verizon is providing only the underlying loop on a wholesale basis, it processes nothing above layer 1, and law enforcement would have to go to the wholesale customer to obtain any other information.

Even where Verizon provides retail broadband access service, it normally does not process or interpret information above layer 3 of the protocol stack for applications that it does not provide to the individual customer, and thus cannot assist law enforcement in translating data to a usable form. As discussed above with respect to voice over IP, the last mile access provider should *not* have the CALEA obligation to provide information at layers of the Internet protocol stack that it does not process or interpret when it provides the transmission, switching, and/or routing functions. Nor will Verizon necessarily be aware what service provider *does* provide applications or services that use these layers. Thus, law enforcement may have to determine who

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[15/] *See* House Report at 3502 ("The question of which communications are in a carrier's control will depend on the design of the service or feature at issue, which this legislation does not purport to dictate.").

the appropriate entity is, and go to that provider for information from the higher layers. This division of responsibility is consistent with the obligations CALEA imposes with regard to digital technology more generally; as Congress explained, carriers are required to provide data carried in a digital form to law enforcement in that form, while it is law enforcement's responsibility to determine if that communication is "voice, fax, or data and [to] translat[e] it into usable form."[16]

C. It is Not Necessary to Identify the Future Services to Which CALEA Applies at this Time.

Verizon agrees with the Commission that it is not necessary to adopt law enforcement's proposal regarding the identification of future services and entities subject to CALEA. Of course, under the Commission's tentative conclusions, future services that satisfy the standard set out in the second prong of CALEA's definition of telecommunications carrier will fall within CALEA whenever the Commission determines that such coverage is in the public interest. But, because future services may use new technologies and be configured or provided in ways not currently foreseen, it makes no sense to decide on an *ex ante* basis which particular future services will and will not fall within CALEA. Any "presumptions" could stifle innovation in services and may create problems given the uncertainty about how technologies will evolve and how future services may be provided, a result that would be in direct contravention of Congress's instruction that CALEA should be implemented in a way that "serve[s] the policy of the United

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[16] House Report at 3502.

States to encourage the provision of new technologies and services,"[17] and not "imped[e] the introduction of new technologies, features, and services."[18]

II. Compliance and Timing

Verizon recognizes the importance of working with law enforcement, vendors, and other industry members to achieve CALEA compliance expeditiously. Yet, as Congress recognized in enacting CALEA, the process of developing compliant solutions is complex, uncertain, and lengthy. For that reason, it provided mechanisms by which carriers could be afforded relief from obligations under CALEA in situations where compliance is not "reasonably achievable."[19] For many packet-mode services, including broadband access services, compliance is not reasonably achievable today and almost certainly will not be within 90 days after the Commission issues its order in this proceeding (the deadline the Commission proposes). The Commission needs to adopt a balanced approach that provides the appropriate incentives for carriers to work expeditiously to come into compliance, while at the same time recognizing that the development of CALEA solutions is complex and will take time and that it should faithfully apply the statutory "reasonably achievable" standard in determining whether carriers should be granted relief from any deadlines the Commission does adopt.

Verizon has worked and will continue to work with law enforcement and do what is necessary to meet its obligations under CALEA as expeditiously as possible. For example, Verizon worked closely with law enforcement in the development of the FBI's flexible deployment program and helped facilitate the FBI's buy-outs of CALEA capabilities from

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[17] 47 U.S.C. § 1006(b)(4).

[18] House Report at 3489; *see also id.* at 3493-94.

[19] 47 U.S.C. §§ 1006, 1008.

Lucent and AGCS. Verizon also has brought its circuit switched facilities into compliance with CALEA in accordance with the terms of the flexible deployment plan it negotiated with the FBI and filed with the Commission. At this time, all 290 of Verizon's circuit switches that were deployed after January 1, 1995 are compliant with CALEA's capability requirements. Moreover, Verizon has worked with law enforcement in prioritizing introduction of CALEA capable software releases on its pre-1995 circuit switches.[20/] As a result of these efforts, all of Verizon's DMS 100 circuit switches and all but one of the 5ESS priority sites have the requisite CALEA capabilities.

Verizon also has continued to work with law enforcement, the industry, and its equipment vendors to determine how to meet CALEA's requirements for packet-mode services and to develop CALEA solutions for such services. As explained above, Verizon has moved aggressively to provide CALEA capabilities on the network-based voice over IP services that it plans to roll out next year. Verizon was actively involved with a standards committee accredited by the American National Standards Institute (ANSI) that was working on a detailed standard (known as T1.678) for CALEA-compliance for voice over packet technologies in wireline communications networks. Even before that standard was finalized, Verizon's RFP for the softswitches it will use to provide its network-based voice over IP services specifically required that any proposal include a statement of compliance with "[s]tandards . . . under development that address the softswitch environment." The ANSI-accredited committee has finalized and approved the T1.678 standard, work for which the FBI's CALEA Implementation Unit noted that it was "pleased with the spirit of cooperation demonstrated by the industry that has resulted

[20/] Under the terms of CALEA, a carrier generally must provide capability requirements on switches installed or deployed before January 1, 1995 only to the extent the Attorney General agrees to reimburse the direct costs of doing so. 47 U.S.C. §§ 1008(a), (d).

in significant progress" to meet law enforcement's needs.[21] Verizon is working with its vendors to fully develop the details of a solution consistent with that standard, after which they will engage in a cycle of testing, any further development, implementation, and deployment. Although these remaining steps mean there remains some uncertainty, Verizon anticipates that its network-based voice over IP service will provide CALEA capabilities and is working to finalize the details as expeditiously as possible.

With respect to other packet-switched or broadband access services to which CALEA is determined to apply, the development of software and equipment with "CALEA solutions" is still at an earlier stage than for voice over IP service. Verizon continues to work with law enforcement, standards organizations, and the industry in determining how to comply with CALEA for these services and defining some of the relevant standards. However, there remains significant uncertainty concerning complex issues such as the scope of CALEA's capability requirements with respect to broadband access services and what the requirements mean when applied to such services. For example, as discussed below, both the meaning of call-identifying information and which entity is responsible for providing specific types of call-identifying information remain uncertain in the context of packet-mode broadband access services. There also remains significant ambiguity regarding the form and manner in which carriers must deliver intercepted information to law enforcement.[22] A number of threshold steps thus remain before CALEA solutions can be developed and deployed.

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[21] Proposed Scope for Version 2 of T1.678, *Lawfully Authorized Electronic Surveillance (LAES) for Voice over Packet Technologies in Wireline Telecommunications Networks*, Electronic Surveillance Technology Section Federal Bureau of Investigation (T1S1 LAES Ad Hoc Group January 19-23, 2004).

[22] As new technology and network architectures develop, there may be some flexibility in how the network is designed to balance law enforcement's needs with respect to delivery with

Although industry has made progress in defining some of the relevant standards for broadband access services, there remains much work to be done. The TIA standard-setting body has approved J-STD-025-B,[23] a standard that elaborated on the technical requirements for complying with CALEA for packet communications. But this standard includes only high-level requirements common across all such packet services, and does not offer technical detail for all relevant services.[24] For this reason, industry has been working diligently to fill in the details of that standard. For example, carriers, manufacturers, and law enforcement have made substantial progress through quarterly meetings on version two of the T1.678 Standard, which will provide additional specifications for VoIP services, and the IP Network Access standard for certain broadband access services. While the absence of industry standards does not excuse carriers' obligations to comply with CALEA, the reality is that most carriers, including Verizon, employ open standards across vendors and providers, and most manufacturers build to a single industry standard, not variations for each carrier. This approach reduces manufacturers' and carriers' development costs and law enforcement's collection equipment costs. Thus, CALEA clearly makes industry standards and safe harbors a focal point of compliance.

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efficiency and operational considerations. But law enforcement will need to work with manufacturers and carriers to develop capabilities and standards that take those factors into account as vendors develop the relevant equipment and not wait until after the service is deployed.

[23] TIA Standard/ATS Committee T1 Trial Use Standard, "Lawfully Authorized Electronic Surveillance" J-STD-025-B.

[24] For example, in order for an equipment vendor to implement CALEA functionality, it must have a precise definition of the "message set" and handoff interface for the information that should be delivered from carriers to law enforcement to specify the particular actions and events that occur during a communication. The J-STD-025-B contains such detailed technical specifications only with respect to a subset of packet services that Verizon does not provide. By contrast, this standard does not reflect the specific requirements for broadband access services such as Digital Subscriber Line (DSL).

Much of the work that manufacturers and carriers must to do to achieve CALEA-compliance cannot begin without an industry-approved standard. Once those standards are in place, vendors will need to develop new software or modify existing software, or even new equipment or network elements. Then, carriers must perform formal testing and further development efforts (if the test results indicate changes are necessary) to determine whether the solution meets the relevant requirements. Finally, the carrier must rollout the new solution to its network; such a rollout needs to be done over time to ensure that deployment does not disrupt the operation of the network.

The result is that the timeframe suggested by the Commission in its NPRM – 90 days following issuance of an order – will not be sufficient to bring broadband access services into compliance with CALEA. The Commission may deal with this reality to some degree by delaying the effective date of its rules or by adopting a blanket transition period for packet-mode services, as it suggests in the NPRM. However, relief under the available statutory mechanisms will still be needed.

The Commission's suggestion that relief under section 109 should be available only in "extraordinary cases," *NPRM* ¶ 104, is inconsistent with the statute. The statute provides the applicable standard for relief – whether compliance is "reasonably achievable" – and the Commission must apply this statutory standard without the creation of extrastatutory hurdles or presumptions against relief. Any other approach would be contrary to law and reversible error. In particular, the Commission must give considerable weight to whether available technology or equipment would permit a carrier to bring its network into compliance. In the absence of such equipment, "compliance would impose significant difficulty or expense on the carrier" almost by

definition.[25] The need to consider the availability of technology is also evident from the statutory enforcement section, which permits a court to issue an enforcement order only if "compliance . . . is reasonably achievable *through the application of available technology*."[26]

Moreover, by preventing providers from obtaining relief even where their vendors could not provide CALEA-compliant solutions, the Commission's interpretation could make carriers responsible for their vendors' failures to meet CALEA's requirements. This would directly contravene CALEA's requirement that *manufacturers* "on a reasonably timely basis and at a reasonable charge, make available to the telecommunications carriers using its equipment, facilities, or services such features or modifications as are necessary to permit such carriers to comply with the capability requirements of section [1002]."[27] Verizon recognizes that carriers also bear the responsibility to work with their vendors to develop the needed equipment and solutions, and it has been doing just that. Carriers should make commercially reasonable efforts to work with manufacturers or Trusted Third Parties to develop CALEA solutions for their systems. If a carrier demonstrates such efforts, the absence of available technology and equipment should create at least a presumption that a carrier is entitled to relief.

Some of the Commission's proposed requirements for what information a carrier seeking relief must provide are appropriate. For example, carriers seeking relief should be required to identify the packet services to be covered and the date those services were offered to the public; the reason the relief is being sought; the applicable standards or specifications, or, if no other standard applies, whether or not the packet requirements of J-STD-025-A apply, and, where the

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[25] 47 U.S.C. § 1008(b)(1).

[26] 47 U.S.C. § 1007(a)(2) (emphasis added).

[27] 47 U.S.C. § 1005(b).

provider cannot provide the content consistent with J-STD-025-A, whether there is an alternative method or interface by which the provider could provide the content; and any additional concerns regarding compliance that may justify relief.

Other requirements that the Commission proposes, however, are problematic. Most importantly, the suggestion that the carrier must "identify and describe the packet CALEA solution(s) the service provider plans to implement," *NPRM*, App. F. ¶ 5, will in many cases be infeasible. A carrier may well be seeking relief precisely because the vendor has not yet developed the requisite solution or the underlying technical requirements have not yet been specified in a standard to which the vendor can build. In such circumstances, a carrier might not be able to provide any concrete information about the solution or architecture it will ultimately implement. Likewise, detailed information about the costs involved, *NPRM*, App. F. ¶¶ 6-7, may be unavailable at the time the carrier is seeking relief.[28/]

Ultimately, industry and law enforcement must continue to work together to develop broadband access solutions that work for the entire industry and that meet the legitimate needs of law enforcement. However, the development of standards and CALEA solutions is an uncertain process, and the Commission should grant relief if a carrier can show that compliance is not reasonably achievable notwithstanding its commercially reasonable efforts to comply. Of course, even if a carrier is granted relief under CALEA, it would remain subject to the obligations under Title III and other similar statutes to assist law enforcement with individual surveillance requests, including for packet-based services, as carriers already do today.

[28/] The Commission also should clarify its proposed requirement to identify and list all intercept access points. *NPRM*, App. F ¶ 3. The carrier should be required to identify only the intercept access points it plans to use, not all potential intercept access points.

III. Call-Identifying Information

One of the most complex questions that arises from the application of CALEA to packet-mode services is the meaning and scope of call-identifying information, particularly with respect to broadband access services. Though the Commission has concluded that this term encompasses not only telephone numbers, but also a range of signaling and other information in the context of circuit-switched communications, this guidance is of little relevance to broadband access services. Thus, while the Commission's definitions "distinguish between origin, destination, direction, and termination and the information that identifies them; permit multiple origins, destinations, directions, and terminations in a call; and provide for determinations inside a network switch or at another point within a network,"[29] those concepts relate primarily to issues of call waiting, recall, and redirected calls, and thus are largely limited to the circuit-switched network. Much of what constitutes "call-identifying information" in the circuit-switched environment simply has no analogue in packet networks.

Because this issue presents significant technical complexities and the answers will be service-specific, the Commission should leave to the standards process the technical details and definition of data elements concerning the requirements for call-identifying information.[30] As

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[29] Order on Remand, *Communications Assistance for Law Enforcement Act*, 17 FCC Rcd 6896, 6911 ¶ 47 (2002) ("*Order on Remand*").

[30] Law enforcement likewise seems to recognize that technical issues of how various carriers must comply with CALEA obligations are beyond the scope of this proceeding and should be addressed in the industry standards-setting process. *See* Frequently Misunderstood Questions on Joint Petition for Expedited Rulemaking, (http://www.askcalea.net/jper.html) ("[T]he petition contends that CALEA should apply to certain broadband services but does not address the issue of what technical capabilities those broadband providers should deliver to law enforcement. CALEA already permits those service providers to fashion their own technical standards as they see fit. If law enforcement considers an industry technical standard deficient, it can seek to change the standard only by filing a special 'deficiency' petition before the Commission.").

the development of standards for VoIP services demonstrates, that process works well, and the industry is actively working on standards for other packet-mode services. And, of course, to the extent that law enforcement or any other party believes any such standard to be inadequate, it can petition the Commission to modify the standard, at which point the Commission can address the issue of call-identifying information in the context of a concrete and well-defined dispute.

The difficulty with attempting to define generically in this proceeding the categories of information that constitute "call-identifying information," as well as what particular information each type of entity subject to CALEA must provide, is illustrated by the proposed list in paragraph 66 of the NPRM. That list appears to focus on packets at the IP layer, including information related to authentication. Yet in some cases, the information will not be reasonably available to the entity that might be termed the broadband access provider because it is not the IP service provider. For example, if Verizon is acting as a wholesale access provider to an Internet service provider, that provider will provide the IP layer configurations and authentication functions. Because Verizon would only be operating at lower layers of the protocol stack, it would not process or have reasonable access to the IP information. To be sure, Verizon would still utilize low layer identifiers in order to properly transport the packets in question (*e.g.*, in the context of an ATM service, the relevant addressing information might be the Virtual Path Identifier and the Virtual Channel Identifier). But that information is different from what the Commission lists in paragraph 66 and may or may not be of use to law enforcement.

Thus, unlike the circuit-switched environment, the Commission cannot simply list a few broad categories of information and require that "the broadband access provider" supply that information to law enforcement. In the context of packet communications, there often is not a single entity involved in providing broadband access and related services and which entity has

what information depends on the protocol layer at which its equipment is functioning. The Commission should allow the standards process (with the participation of law enforcement) to sort through these complexities and define what constitutes call-identifying information for a particular service and which entity is in a position to provide that call-identifying information.

Finally, as the Commission recognizes, a provider is required to provide call-identifying information only to the extent it is "reasonably available." Verizon agrees with the Commission's tentative conclusion that, if providing particular information would require a provider to "significantly modify" its network, then the information is not "reasonably available" to that provider. *NPRM* ¶ 67; *see also* 47 C.F.R. § 64.2202. This conclusion is consistent with CALEA's legislative history, which makes clear that if call-identifying "information is not reasonably available, the carrier does not have to modify its system to make it available."[31/]

IV. Trusted Third Parties

Verizon concurs with the Commission's conclusion that a "Trusted Third Party" approach can be a useful method of helping some carriers comply with CALEA. Trusted Third Parties – entities that have access to a carrier's network and remotely manage the intercept process for the carrier, *NPRM* ¶ 69 – may allow some small carriers to effectively outsource their CALEA obligations. The use of Trusted Third Parties should not, however, be required of any carrier. As the Commission notes, carriers use a variety of means for providing information to law enforcement. In light of this inherent variation, there is not a "one size fits all" solution for

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[31/] House Report at 3502.

providing call-identifying information. Indeed, CALEA forbids the Commission from requiring carriers to adopt any particular network design.[32]

Trusted Third Parties are not a "turnkey" solution and can be unnecessarily intrusive and inappropriate, particularly for large carriers with complex networks. In order for a service provider to utilize a Trusted Third Party approach, it must have intercept access points in its network to capture communications and send them to the Trusted Third Party for call-identifying information extraction, formatting, and delivery to law enforcement. Yet the creation of intercept access points either requires vendors to have developed software to conform to the relevant (in many cases, still nonexistent) standards or the insertion of probes, a task that requires substantial re-engineering of the network. Furthermore, giving a Trusted Third Party this degree of access to communications in the provider's network may cause problematic side effects on normal provisioning and operations functions, as well as raising privacy and security concerns. For example, if a Trusted Third Party sets up an intercept without knowing that the router is having capacity problems, the intercept can degrade or disrupt the router.

For this reason, even if the Commission concludes that Trusted Third Parties are an effective method for some carriers to provide call-identifying information, it should not (and indeed may not, consistent with CALEA) impose any requirement that all carriers use such an approach. Rather, it should remain up to individual carriers to determine how they would like to provide call-identifying information. Indeed, to the extent the Commission concludes that Trusted Third Parties are capable of effectively extracting call content and call-identifying

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[32] *See* House Report at 3502 ("The question of which communications are in a carrier's control will depend on the design of the service or feature at issue, which this legislation does not purport to dictate."); *id.* at 3489 (CALEA should not "imped[e] the introduction of new technologies, features, and services").

information, law enforcement, rather than carriers, could employ Trusted Third Parties with specialized filtering equipment to do that work.

The Commission also should not allow the representations of parties that might act as such Trusted Third Parties to shape the Commission's views of what information meets the statutory "reasonably available" standard, what the proper time frame for CALEA compliance is, or what extensions should be available for carriers who are unable to comply. Even if these parties' representations of what they can deliver are accurate for some carriers, the same representations may not be accurate for all carriers. Promises made under such circumstances should not drive the Commission's rules. Rather, the Commission should examine the circumstances of different types of carriers and make determinations regarding what is reasonably achievable and the time frame for compliance on the basis of what makes sense for the industry as a whole.

V. Enforcement

The Commission's proposal to expand CALEA's current enforcement scheme and augment its existing authority is neither necessary nor desirable. Section 108 of CALEA already provides specific enforcement mechanisms that permit law enforcement to file an action against a non-compliant carrier in federal court. That section, moreover, contains detailed requirements, including specified standards that must be met before an enforcement order can be issued. Law enforcement has not used the enforcement mechanisms under section 108. As a result, there is no basis to presume that law enforcement needs to add *more* authority to its enforcement arsenal, and no statutory authority for the Commission to do so. Further, the Commission could not adopt an enforcement scheme that would undermine the protections established by section 108 and disrupt CALEA's careful balance between encouraging innovation and protecting law enforcement interests.

Of course, the Commission has authority to adopt rules to implement CALEA's requirements under section 229, so long as those rules are consistent with the statute itself. For example, while the Commission could adopt the requirements of section 103 as rules, *NPRM* ¶ 115, it would have to incorporate in those rules the statutory limitations, including the "reasonably achievable" condition. Further, the Commission already has available mechanisms to require carriers to comply with its own lawful orders and rules. As a result, there is no need to create any new enforcement mechanisms, particularly in the absence of any evidence that existing mechanisms are ineffective or inadequate. CALEA itself does not create any new enforcement authority for the Commission or provide a basis for creating new enforcement mechanisms as it suggests. *NPRM* ¶¶ 115-16. Thus, any attempt to create such new mechanisms would be unlawful.

VI. Costs

Where CALEA requirements are applied to new services and technologies, the costs of the resulting CALEA obligations will necessarily depend at least in part on what solutions are adopted in the standards process. It is for that very reason that all parties – industry, vendors, and law enforcement – need to participate in the standards setting process. This will optimize the efficiency of both the network design costs borne by the industry and the intercept costs borne by law enforcement. Given the large variation in the types of carriers and services that will be subject to CALEA, the Commission should not require all carriers to recover their costs through a single method. Carriers ought to have the option to recover costs from their customers using whatever legal means they may choose; one such option, necessary for carriers subject to price cap regulation, should be the ability to file a tariff with the Commission that would enable the carrier to recover CALEA costs through a competitively-neutral federal surcharge that

applies to end users, as well as wholesale customers. There is ample precedent for this approach evidenced by the local number portability surcharge mechanism.[33/]

The Commission has already correctly concluded that providers can "recover at least a portion of the CALEA software and hardware costs by charging to [law enforcement], for each electronic surveillance order authorized by CALEA, a fee that includes recovery of capital costs, as well as recovery of the specific costs associated with each order."[34] In particular, where carriers incur particular costs to accommodate specific law enforcement requests, they should be permitted to pass those costs along to law enforcement. For example, carriers should be allowed to recover from law enforcement costs related to law enforcement requests with respect to the manner and location of delivery and transport of intercepted information to law enforcement, including the costs a carrier incurs to "backhaul" traffic so it can be delivered to law enforcement. Because the magnitude of these costs will be a function of the architecture used to

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[33/] *See, e.g.,* Third Report and Order, *Telephone Number Portability*, 13 FCC Rcd. 11,701, ¶ 135 (1998).

[34] *Order on Remand* ¶ 60.

intercept and deliver information to law enforcement, this further illustrates the need for both industry and law enforcement to work cooperatively to establish efficient CALEA standards.

Respectfully submitted,

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Attachment A

The Verizon local exchange carriers participating in this filing are:

Contel of the South, Inc. d/b/a Verizon Mid-States
GTE Midwest Incorporated d/b/a Verizon Midwest
GTE Southwest Incorporated d/b/a Verizon Southwest
The Micronesian Telecommunications Corporation
Verizon California Inc.
Verizon Delaware Inc.
Verizon Florida Inc.
Verizon Hawaii Inc.
Verizon Maryland Inc.
Verizon New England Inc.
Verizon New Jersey Inc.
Verizon New York Inc.
Verizon North Inc.
Verizon Northwest Inc.
Verizon Pennsylvania Inc.
Verizon South Inc.
Verizon Virginia Inc.
Verizon Washington, DC Inc.
Verizon West Coast Inc.
Verizon West Virginia Inc.

The Verizon long distance companies participating in this filing are:

Bell Atlantic Communications, Inc. d/b/a Verizon Long Distance
NYNEX Long Distance Company d/b/a Verizon Enterprise Solutions
Verizon Select Services Inc.
Verizon Global Networks Inc.

The Verizon Avenue Corp. companies participating in this filing are:

OnePoint Communications–Colorado, L.L.C. d/b/a Verizon Avenue
OnePoint Communications–Georgia, L.L.C. d/b/a Verizon Avenue
OnePoint Communications–Illinois, L.L.C. d/b/a Verizon Avenue
VIC-RMTS-DC, L.L.C. d/b/a Verizon Avenue