one ill-behaved modem or user will adversely impact all users on that portion of the cable plant. This is very different from the situation with telephone-based Internet access because one user's connection to the dial-up concentrator cannot adversely impact another user's connection to the dial-up concentrator. If one user takes up an excessive amount of upstream bandwidth, other users will suffer network capacity shortages. When capacity runs out, the MSO typically must change its "node combining plan", purchase and install more CMTS equipment, and reallocate IP addresses to cable modems and customer computers. All of this must be co-ordinated tightly between the MSO – which controls the HFC plant infrastructure and provisions additional CMTS line cards and other equipment – and the ISP which provides traffic management data, IP address plans, DHCP services, DNS mappings, and other network related functions to minimize service disruptions when such expansions occur.

16. All users connected to a given CMTS interface share the same downstream and upstream bandwidth. If one user is consuming that bandwidth, the capacity is gone and is not available to other users concurrently. This is very different from a telephony or ATM network design. Further, application sensitive QoS is essential to providing advanced services such as streaming of rich multimedia content and telephony in this shared environment. Implementing multi-provider access without careful attention to these unique needs could substantially hinder the deployment of these types of services which are not generally operable in the broader Internet, thereby depriving consumers of these services and the companies of revenue from these services.

17. In addition, although the CMTSs are owned by the MSO, they are currently managed, configured and controlled by the relevant ISP (e.g., Excite@Home) for almost all functions. The MSO usually controls the RF parameters of the system such as frequency selection and transmit power

levels. In a multiple ISP scenario, the MSO would need to develop their own capability to manage and configure the CMTSs as well as all associated cable modems.

The Merger Would Not Provide a Combined Excite@Home/Road Runner the Ability to Control the Development of Proprietary Network and Software Protocols

18. Parisian argues that a combined Excite@Home will have the ability to establish proprietary network and software protocols designed to keep software, content, and applications from running on any system other than its own. Parisian Decl. at ¶ 16. This argument is not credible. Internet standards are evolving so quickly – and with input from so many companies -- that no one company can control their development. Consequently, no single company enjoys a "first mover" advantage just by getting to the market first. Standards developed for video streaming, Internet routing, XML and HTML, and Java script represent only a few examples in which the first company to market a service has had little, if any, effect upon the standards underlying that service. Parisian's claims that a combined Excite@Home / Road Runner could establish proprietary network and software protocols ignore the fact that Internet software, content, and applications is written to existing open, compatible standards used industry-wide and which are constantly reviewed and updated by standards-setting bodies such as the IETF. It is important to note that almost any service provider today has access to the same technologies to perform this kind of filtering today, but do not do it because the marketplace would punish such efforts severely, causing consumers to go elsewhere for service.

Excite@Home Does Not Discriminate Against Third Party Content

19. In his declaration, Parisian suggests that Excite@Home will attempt to impair the content of third-parties providers once the merger is complete. There is no basis for such a claim. For instance, Excite@Home utilizes high performance caching servers located at the headend level provide improved consumer performance and reduce transport cost to the RDC and backbone systems. On the Excite@Home network, content from third party websites is cached through an automatic process that uses an algorithmic equation based on customers' traffic patterns, known as the "least recently used," or "LRU" algorithm. The LRU algorithm eliminates older cached content that has not been requested by Excite@Home customers in order to free up available head end space for more popular content. Simply put, websites that customers visit frequently stay in the cache while websites that customers do not visit exit the cache.

20. Content providers, and not Excite@Home, control whether, and to what extent, their content will be cached by Excite@Home. For example, a content providers that does not wish its content to be cached (so that users always have real-time access to their websites) simply conveys this fact to Excite@Home electronically in a field in the html header, and the request is automatically obeyed by the Excite@Home network. Content providers also retain control over how frequently their cached content is refreshed through similar instructions set forth within the html header (*e.g.*., CNN or Yahoo! may request that its content is refreshed more frequently -- 2 minutes, 10 minutes, etc. -- than other, less time sensitive, websites). Regardless of how popular a website may be, Excite@Home honors the refresh rates requested by the content provider. Of course, Excite@Home customers can always access content directly and bypass the cache by pressing Shift/Reload.

21. Contrary to the claims of Parisian and Shadman, Excite@Home does not "hobble" or impair the service of any other ISP or portal. Excite@Home provides unfettered access to the Internet, and attempts to route data in the most expeditious manner possible. While Excite@Home does cache the content developed by firms with whom it has an affiliation agreement in order to provide a rich, multimedia environment for @Home subscribers, this is no different that any other ISP that attempts to attract customers by featuring particular content or services through the use of on-screen buttons or links.

22. In a related argument, Parisian incorrectly claims that limitations on video streaming are an attempt to restrict consumer viewing choices. Video "streaming" traffic is notorious for causing congestion on the Internet. Limitations on video streaming make perfect sense in light of the bandwidth-intensive characteristics of such traffic because they help ensure the ability of Excite@Home and its cable partners to manage bandwidth use. Until standards for managing bandwidth are developed and bandwidth consumption can be measured and priced to reflect higher usage, a limit on overall traffic helps reduce the "tragedy of the commons" that would otherwise ensue.

23. I am aware of claims that Cisco routers deployed in the Excite@Home network could be used to impair or hobble the delivery of content from third parties. Cisco routers do enable Excite@Home and other users to counter denial of service attacks against its servers and its subscribers that are launched from outside the network (i.e., flooding the network or a customer with packetized traffic) by putting a rate limit on the maximum amount of ICMP traffic that can come into the network. Such uses of these capabilities are common among ISPs. This function is

not content sensitive, and its use is designed to protect the integrity of the Excite@Home network.

24. Moreover, the Cisco router capability described above is not cable-specific. In fact, it is used by many ISPs for a variety a purposes, usually related to infrastructure protection. In my experience, I am not aware of any company that uses this software to block particular content.

There Are Significant Technical Difficulties That Are Associated With the Implementation of a Forced Access Requirement.

25. Contrary to claims that a forced access requirement would be "easy" or "simple," there are significant technical difficulties that would be associated with the implementation of such a requirement. Neither Parisian nor Shadman address these difficulties in their declarations.

26. First, the "shared" nature of cable plant – in which every customer is capable of receiving every signal transmitted on the network, in contrast to the dedicated pathway for each user on a traditional telephone network – means that one cable customer could interfere with another customer's connection to the Internet. There is currently no ability to allocate bandwidth to a "pool" of unaffiliated ISP customers to prevent this interference. Such a capability is critical to supporting multiple ISPs on a single cable network. Otherwise, one ISP's customers could overwhelm the cable network's capacity and effectively deny service to the customers of another ISP.

27. Second, MSOs do not have the capability to support many of the OSS functions essential to the provision of Internet access services, as they were developed by Excite@Home and Road Runner. Orders for service come in from the MSO's backoffice platforms, most of which are outsourced to companies that are not owned or controlled by the MSO's themselves (such as Cable Data

Systems, or CSG). Further, changes would be required to network management systems, capacity engineering systems, work order processing, scheduling and billing systems. Assertions that creating these new OSS interfaces is a simple matter and would take little time for cable are ludicrous. These systems are critical for a true commercial roll-out of a mass market service. Manual provisioning of the type GTE has used in its Florida trial do not scale to the customer demand that cable is currently supporting.

28. Third, forced access could jeopardize cable system integrity. Provisioning service to customers, performing network diagnostics, and trouble-shooting require interaction with the cable network. Notwithstanding Shadman's unsupported claims that Ameritech's forced access model would not "pos[e] a significant risk of frequency interference ," he fails to address the adverse consequences caused by applying a forced access model on the cable architecture (Shadman Declaration at ¶ 33). Permitting multiple ISPs to perform these cable system integrity functions – even if they have the capability to do so – would present numerous security and network integrity questions for MSOs and for any ISP delivering service on a cable system. For example, cable modem filters are used to protect a customer from their mistakes or to prevent a customer from disrupting service. The forced access system proposed by GTE, for example, would limit the ability of the MSO to do proper engineering by being able to differentiate and filter various classes for traffic. While changes could be made to the cable modem to enable such filtering, the impact on modem performance could be substantial.

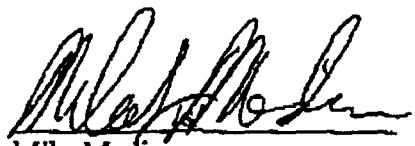
29. Fourth, network support cannot easily be managed on a system-by-system basis. Forced access would place inconsistent demands on each cable system, which would differ from community to community. Neither Parisian nor Shadman explain how one cable system could change quality of

service parameters in the cable modem, enable multicast sessions for pay-per-application streams or configure small office or home office virtual private networks.

Conclusion

30. The Parisian and Shadman Declarations reflect a basic misunderstanding of current cable network design and operation, and equipment capabilities and standards. They also ignore the substantial commitment of time, energy, and resources that would be necessary to re-architect the way cable data networks operate, provision and are maintained today.

I declare under the penalty of perjury that the foregoing is true and correct.



Milo Medin
Senior Vice President and
Chief Technical Officer
Excite@Home Network
650/569-5000

Dated: September 17, 1999

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DECLARATION OF LORINE CARD

1. I am Director of Congressional Affairs, MediaOne Group. As Director of Congressional Affairs, I am responsible for overseeing contacts with Congress and Congressional staffs, organizing grassroots activities, and managing the political action committee. As part of my responsibilities, I actively monitor MediaOne's rollout of advanced services throughout the nation.

2. I have read the Petition to Deny and the Supplemental Petition to Deny of the Telecommunications Advocacy Project (TAP), in which TAP alleges that MediaOne is "redlining" its broadband deployment to exclude low income or minority areas.

3. TAP's allegations are untrue. Far from engaging in redlining, MediaOne has been in the forefront of deploying upgraded facilities in the communities it serves. Wherever MediaOne upgrades its cable network, it does so in *all areas* passed by the cable system, without regard to income or demographics.

4. TAP alleges that MediaOne has redlined in Los Angeles. This is untrue. MediaOne's initial deployment in Los Angeles included roll-out of new and advanced services to an economically and ethnically diverse base of residential customers. MediaOne was not only the first cable operator in the City of Los Angeles to begin upgrading its systems to 550 MHz and then to 750 MHz, and the first to offer advanced services, but it began its rebuild in South Central Los Angeles, a community with a population that is 48% Latino and 43% African American. Although the 750 MHz hybrid fiber coax network rebuild will not be entirely completed until year end 1999, MediaOne is already offering both high speed data service ("HSD") and telephony in South Central Los Angeles, and in neighboring Compton, Carson, Inglewood, Lynwood and

Watts, all communities with significant minority populations. Neither service is yet available in Beverly Hills, Pacific Palisades or Malibu (generally recognized as high income communities).

5. TAP allegations about Atlanta, Georgia, Pompano Beach, Florida, Fresno, California, and Richmond, Virginia, are similarly untrue. MediaOne is upgrading all of its systems in Atlanta, where the population is over 50% African American, and many Atlanta systems serve areas where the average annual income is $30,000 or less. Likewise, MediaOne upgraded the entire Pompano Beach, Florida system, the entire Fresno, California system, and the entire Richmond, Virginia system, including all minority and low income areas. In the Richmond market, the City was rebuilt and HSD and telephony were offered ahead of the surrounding suburbs.

6. In Hamtrack, Michigan, MediaOne also has upgraded its system to offer broadband services, including HSD, and that community is 78% African American with an average household income of $15,000.

7. MediaOne has upgraded dozens of other communities so as to be capable of providing high speed data service, constituting roughly 50% of all the households it passes. These communities include smaller cities such as Santa Fe Springs, California, a 66% Hispanic community, and localities such as Sanford, California, whose average household income is $26,735, and East Wareham, Massachusetts, whose average household income is $32,097. Contrary to TAP's allegations, MediaOne also has upgraded all its Jacksonville, Florida systems. In each locality, the upgraded facilities pass every neighborhood.

I declare under penalty of perjury that the foregoing is true and correct.

Dated this 16th day of September, 1999

Lorine Card

Lorine Card

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