Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:	)	
	)	
Applications for the Consent to Transfer	)	
of the Control of Licenses and Section 214	)	CS Docket No. 00-30
Authorizations by Time Warner, Inc. and	)	
American Online, Inc. Transferors, to	)	
AOL Time Warner, Inc. Transferee	)	

COMMENTS OF
PROFESSORS GERALD R. FAULHABER AND DAVID J. FARBER
ON
AOL TIME WARNER'S PETITION FOR RELIEF, APRIL 2, 2003.

Professors Gerald R. Faulhaber and David J. Farber, both of the University of Pennsylvania, submit these comments in response to the FCC's Public Notice of AOL Time Warner's Petition for Relief from Instant Messaging Requirements,[1] which were adopted by the FCC as a condition for approval of the merger.[2] We note particularly the affidavit of the distinguished Professor William Rogerson of Northwestern University, former Chief Economist at the FCC, submitted in support of this petition, which forms the petition's economic basis. We therefore direct our comments to this affidavit, with the obvious implications of these comments for the petition itself.

Professor Faulhaber is Professor of Business and Public Policy at the Wharton School, University of Pennsylvania; he was Chief Economist at the FCC from July 1, 2000 to June 30, 2001. He has studied and written on telecommunications and Internet issues throughout his academic career. Professor Farber is Alfred Fitler Moore Professor of Telecommunications Systems, School of Engineering and Applied Science, University of Pennsylvania, and former Chief Technologist at the FCC from January 2000 to January 2001. He is a leading figure in research and applications of networking and the Internet. Professors Faulhaber and Farber were at the FCC during consideration of the AOL Time Warner merger, and advised the Commission members and staff on the merger.

Dated: April 5, 2003

---

[1] See Public Notice, "AOL Time Warner Inc. Submits Petition for Relief from Instant Messaging Interoperability Requirements", DA 03-1092, April 4, 2003).
[2] *Applications for the Consent to Transfer of the Control of Licenses and Section 214 Authorizations by Time Warner, Inc. and American Online, Inc. Transferors, to AOL Time Warner, Inc. Transferee,* Memorandum Opinion and Order, 16 FCC Rcd 6547 (2001) ("The Merger Order")

THE FCC'S INSTANT MESSAGING CONDITION IN THE MERGER ORDER

In brief (and as described in the petition), the FCC's IM condition prohibited AOL Time Warner from offering an advanced IM-based high speed service such as videoconferencing unless they first offered to interoperate with its IM competitors, either via contract or a public standard, or else clear and compelling evidence that AOL Time Warner was no longer dominant in the IM market. This petition attempts to exercise the latter option, seeking to demonstrate it no longer occupied a dominant market position in the IM market.

CHANGING MARKET CONDITIONS: AN ANALYSIS

The petition and the affidavit correctly point out that since the Merger Order of January 2001, market conditions have altered considerably. The affidavit cites Jupiter Media Metrix data that shows the market share of AOL Time Warner's Instant Messaging (IM) service continues to decline, albeit quite slowly. While admitting that AOL's IM service is "a strong competitor" with 58.5% market share, Rogerson suggests that AOL's declining market share offers proof that the IM market has not tipped and is not likely to tip, a key finding that supported the condition from which AOL Time Warner is seeking relief.

Exactly the same sort of evidence was used by AOL during the merger discussions, and the same conclusions were drawn. The FCC recognized that if the IM market were fully mature, with little or no growth in total customers, then this argument would be very compelling: if the IM market had tipped, then the dominant firm would be gaining market share, not losing it; would be gaining customers, not losing them. But the IM market was not mature at the time; it was growing very quickly, and all providers were gaining customers. AOL's two competitors, Microsoft and Yahoo!, were gaining customers slightly more quickly than AOL, so their market share was increasing slightly. However, in a growing market (as opposed to a mature market), changing market share is not compelling evidence.[3] Other factors, such as marketing efforts, learning effects, etc. could lead to market share changes, as well as network effects, and other factors that impact market share (such as asymmetric marketing efforts, asymmetric service feature sets, differential firm efforts) are more likely to be present in growing unstable markets than in mature stable markets.

What are the facts today? The market continues to grow; IM usage increased " in 2002 a whopping 57% over 2001."[4] It is still a growth market, in which market share data is only marginally helpful in determining whether or not the IM market has tipped to AOL Time Warner. But it does suggest that Microsoft and Yahoo! are indeed stable competitors today. At the time of the case, this market was truly

---

[3] The economic theory to support this assertion is developed in "Network Effects and Merger Analysis: Instant Messaging and the AOL-Time Warner Case," *Telecommunications Policy*, 26 (5-6), 311-333, June, 2002. This article also contains a discussion of the evidence presented by AOL regarding IM at the time of the case.

[4] "This is not your teenager's Instant Messaging," Forrester Research Report, January, 2003.

nascent, and almost nothing could be gleaned from such data. Today, we at least know that there are two stable competitors to AOL Time Warner, and that is at least suggestive (if not dispositive) that market tipping is less of an issue today than at the time of the case. But it is merely suggestive; it does not constitute "clear and compelling evidence," in the words of the Petition.

Another change in market conditions has been the uptake of IM by business. At the time of the merger, virtually all IM usage was end-consumer, not business. In the intervening years, business has become a significant IM customer. Usually, business IM systems are focused on internal use only, for employees to "IM" each other, not the outside world. For such uses, the network effects of the public IM network are simply not important. But this suggests that the important market share number for IM is not AOL's share of the total market, but AOL's share of the *consumer* market,[5] which is the market for which network effects are most pronounced.[6]

Another changed condition is the availability of multi-IM clients, such as Trillian.[7] These clients are desktop applications that merge multiple IM services into a single "buddy list" and interface, permitting users to maintain multiple IM accounts without the cost of keeping two or more clients on their desktop and bridging the gaps among them by cutting and pasting messages. At the time of the merger, such multi-IM clients existed, but AOL had managed to block such clients from access to AOL's IM database. Apparently, Trillian and other clients can now bypass AOL blocks and supply "as if" interoperability among the three leading IM providers (as well as Internet IRC and other providers). Trillian claims 8 million downloads, suggesting widespread use; however, Forrester Research[8] suggests a mere 3-4% of customers use all three of the most popular IM services. Nevertheless, this development tends to suggest that interoperability is less important today than it was at the time of the merger.

However, there is one condition that is unchanged, at that is AOL Time Warner's failure to interoperate. During the merger analysis, AOL Time Warner pledged that it was absolutely committed to interoperation, and was working on it, and it would be available by August, 2001.[9] However, in its Fourth Progress Report on Instant Messaging Interoperability,[10] AOL Time Warner told the FCC this January that it was

---

[5] Since the merger, IM has also been deployed on wireless phones, where AOL has again chosen non-interoperability. Wireless IM should be counted in the consumer market, for purposes of market share calculations; it is not clear if the Jupiter Media Metrix data reflect this.

[6] By analogy, network effects in the telephone industry are very strong, and focused on the public switched network. Businesses usually have private systems, PBXs and networks, used primarily for internal communications. These systems "internalize" their own network effects, and contribute little to the overall network effect of the public switched network. Similarly, adding in all business users to the market shares of the three IM providers may well distort the network effect implications.

[7] http://ceruleanstudios.com/trillian/index.html

[8] "This is not your teenager's Instant Messaging," Forrester Research Report, January, 2003.

[9] Statement by Gerald Levin, CEO of Time Warner, at FCC en banc hearing, July 27, 2000, that IM interoperability would be available for field test "within one year."

[10] Letter from Steven Teplitz, AOL Time Warner VP and Associate General Counsel to the FCC, dated January 13, 2003. at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-230837A1.pdf.

abandoning server-to-server interoperability despite its previous commitment. Clearly, the most immediate impact of adopting interoperability is to make your own customers better off. By denying its customers interoperability, AOL Time Warner is denying them access to more than 40% of the IM market. The only reason[11] it might want to deny these benefits to its users is if by doing so it denied even greater benefits to the customers of its competitors, which is exactly what market tipping is all about. Denying interoperability is a strategic decision of a firm, which only makes sense when its market presence is strong enough to cause tipping, thus increasing its long run profits at the expense of its own customers. Professor Rogerson is silent on this point; if AOL Time Warner really hasn't tipped the IM market, then their optimal strategy is to interoperate, and yet they refuse to do so.

AOL Time Warner has a very easy way to demonstrate that it is no longer dominant in IM: offer to interoperate with their competitors. If they are truly not dominant, then this is their best strategy. But if they are dominant (as they claim they are not), then they would refuse to interoperate (which is what they are actually doing).

SOME OTHER ISSUES IN PROFESSOR ROGERSON'S DRAFT

Dominance Professor Rogerson goes to some lengths to compare AOL Time Warner with AT&T on the issue of "dominance." The comparison is actually irrelevant; the FCC's consideration of the dominance/non-dominance took place in a classic horizontal market power context. The AOL Time Warner dominance issue takes place in a network effects industry, which is a totally different context. Although the term "dominance" is used in both situations, the meaning is quite different.

Comparison with word processors Professor Rogerson alludes to the presence of network effects in word processors and the unwillingness of regulators to demand interoperability among word processors. This is quite misleading, in that the major word processors have "converters" built into them, so that Microsoft Word is able to read and convert WordPerfect documents, and vice-versa. In the case of IM services, there is no "converter" that can be unilaterally adopted by (say) Yahoo! to permit its customers to read and send IMs to AOL Time Warner customers.[12] In fact, AOL Time Warner has gone to great lengths to block other IM providers from attempting to do so. There is no need to demand interoperability among word processors because converters do the job.

Competition has driven prices to zero On the face of it, this cannot be evidence that the market is competitive; no stand-alone service is ever offered by a profit-seeking firm for free. There are two possible reasons for a zero price: (i) the firm is attempting to build market share quickly in order to obtain proprietary network effects and tip the market in its favor; or (ii) the firm offers the service as a feature of

[11] Several other reasons for failing to interoperate were advanced to the FCC during the merger review; each reason is dealt with at length in the Merger Order and ultimately dismissed, an action vindicated by AOL Time Warner's subsequent (and predicted) decision to abandon interoperability.
[12] With the exception of third-party multi-IM clients such as Trillian, mentioned above.

a broader service (such as AOL ISP service) without charge. Either one may be perfectly valid, but it is disingenuous to claim that a zero price "proves" the market is competitive.

Costs of setting an interoperability standard Professor Rogerson suggests that mandating compatibility among services is likely to be socially costly, for three reasons:

(i) standards can constrain an individual firm's design decisions;
(ii) it is extremely costly to develop the standards and adjudicate disputes; and
(iii) firms would game the regulatory system to achieve standards best suited to their own strategies.

We answer each in turn.

(i) The use of standards on the Internet has unleashed an unprecedented torrent of innovation, based on basic agreed-upon open standards. Far from constraining firms, it has been tremendously liberating to have simple open standards that firms can design to. The overwhelming evidence from the Internet suggests that open standards foster innovation, not inhibit it.

(ii) Apparently, the cost of developing a standard has not stopped the Internet Engineering Task Force (IETF), coordinating body for Internet protocols, from developing the Session Initiation Protocol (SIP) (see http://www.ietf.org/html.charters/simple-charter.html). Should it be necessary, adjudication should occur through the courts (or perhaps arbitration), a process that appears to work throughout the rest of the economy.

(iii) The Merger Order was quite clear that the Commission had no interest in setting a standard nor administering that standard nor in any way regulating the standard. The FCC proposed that AOL Time Warner could adopt a public standard (such as SIP) or agree to standards via contractual arrangements, neither of which involve regulators at all. "Gaming the regulators" was anticipated by the Merger Order and fully deflected by simply not having regulators involved at all. Of course, it is possible for a firm to game the IETF standard-setting process, and some gaming occurs in all voluntary standards bodies. But there is no evidence that this is been a problem in establishing the SIP standard.

CONCLUSION

Conditions in the IM market have indeed changed since the Merger Order. AOL Time Warner has suffered a rather small erosion of market share, but still dominates the market with 58.5% share. However, it is still a growing market, and although market share is suggestive, it proves nothing about whether or not the market has tipped. It is instructive to note that the market appears to have three stable competitors, which is more suggestive (than at the time of the Order) that the market

has not tipped, but again this evidence is suggestive rather than "clear and convincing." Additionally, the (small) success of third-party multi-IM clients such as Trillian suggests that market tipping is less of an issue that it was at the time of the Order.

However, AOL Time Warner's strategic behavior has not changed, and that is perhaps the most compelling evidence that they believe they can eventually tip the market by refusing to interoperate. Such strategic behavior only makes sense if the market leader expects the market to tip in its favor; otherwise, interoperation is their best strategy. But the Petition and the Affidavit are strangely and tellingly silent on this key piece of evidence.

We also note that AOL Time Warner failed to exploit its newly acquired cable assets to deploy an AOL Broadband service. Since the firm had no Broadband service, it had little reason to care about advanced IM services such as two-way video that are not feasible on dial-up connections. However, AOL Time Warner has just recently begun marketing AOL Broadband, apparently now trying to capitalize on its cable assets. It should not come as a surprise that as AOL Time Warner rolls out its new broadband offering, it wishes to be relieved of the requirement to interoperate if it offers an IM-based high-speed service. Their behavior suggests that they may well have such a service ready to roll out soon as a feature of their AOL Broadband, and wish to keep their network effects proprietary. In fact, it is precisely this case that the Merger Order anticipated when it imposed the IM condition.

We urge the FCC to proceed cautiously. While conditions have evolved since the Merger Order that suggest network effects and tipping are not as urgent today, other evidence suggests that it is perhaps even more urgent. The FCC needs to recall that AOL Time Warner has in its own hands the ability to offer advanced IM-based high-speed services without let or hindrance: it need only interoperate with its competitors, as it promised the world it would do two years ago, to the benefit of all customers.