



# VIEWS AND NEWS

ECONOMICS AND TECHNOLOGY, INC.

November/December 2011

## IN THIS ISSUE

- AT&T Withdraws its FCC Application to buy T-Mobile
- FCC Intercarrier Compensation Order: Boon or Bust for VoIP Providers?

### AT&T Withdraws its FCC Application to buy T-Mobile

On November 22, 2011, FCC Chairman Julius Genachowski announced that he was proposing that the Commission require that AT&T's proposed acquisition of T-Mobile be subject to an administrative hearing before the agency would approve or deny the takeover, and that a proposed Order was being circulated to the other Commissioners for adoption by the full Commission. In the waning hours before Thanksgiving, AT&T quickly withdrew its FCC Application without prejudice. AT&T had the right to withdraw its own application, but it seems clear that it did so in an effort to avoid the FCC publicly expressing its concerns over the potential harms resulting from the proposed transaction. After pulling its petition, AT&T announced that:

"AT&T Inc. and Deutsche Telekom AG are continuing to pursue the sale of Deutsche Telekom's U.S. wireless assets to AT&T and are taking this step to facilitate the consideration of all options at the FCC and to focus their continuing efforts on obtaining antitrust clearance for the transaction from the Department of Justice either through the litigation pending before the United States District Court for the District of Columbia, Case No. 1:11-cv-01560 (ESH) or alternate means. As soon as practical, AT&T Inc. and Deutsche Telekom AG intend to seek the necessary FCC approval."

While AT&T seems to be carrying on as if this were a minor speed bump in its effort to swallow the nation's fourth largest wireless carrier, this certainly is a major blow to AT&T. In its merger agreement, AT&T assumed an obligation to pay a breakup fee estimated to be worth \$6-billion (\$3-billion in cash that would be paid over to T-Mobile plus spectrum whose value has been pegged at about \$3-billion if AT&T was unable to gain the regulatory approvals necessary to consummate the transaction). In the face of a Justice Department lawsuit, suits brought by competitors, and arbitrations filed by individual consumers seeking to halt the merger, this trouble at the FCC was enough to shake at least AT&T's financial auditors' confidence: AT&T announced on November 25 that it was taking a pretax accounting charge of \$4-billion (\$3-billion cash and \$1-billion book value of spectrum) to reflect the potential break-up fees due Deutsche Telekom in the event the transaction does not receive regulatory approval.

To whatever extent AT&T's withdrawal of its FCC application was aimed at staving off the issuance of an adverse finding by the Commission, it didn't succeed. On November 30, the FCC went ahead and released the staff study of the proposed transaction

anyway, including its view of the competitive harms that would likely result from the transaction. After reviewing the FCC's findings, it seems increasingly likely that T-Mobile will be the recipient of much needed capital and advanced spectrum.

#### The FCC Staff Study

It is perfectly clear why AT&T would have wanted to suppress the FCC Staff's findings. The report is unequivocal that the Staff feels that AT&T did not meet its burden of proof that the merger would serve the public interest, convenience, and necessity. The report lays out 150 pages of research, analysis, and discussion, none of which is particularly supportive of AT&T's position.

The Staff begins its analysis of the merger with an assessment of *pro forma* post-merger market concentration in individual local markets. On June 20, 2011, ETI Vice President Colin B. Weir submitted an expert declaration in FCC Docket WT 11-65, containing an expanded analysis of wireless market concentration across hundreds of individual "Economic Areas" ("EAs"). An EA generally consists of one principal population center and the area surrounding it. The Weir Declaration analyzed concentration using FCC data showing the quantity of 10-digit local telephone number assignments by carrier. This so-called Numbering Resource Utilization Forecast ("NRUF")/local number portability ("LNP") data can be used to develop reasonably precise carrier market shares, and is thus considered confidential by the FCC. Access to the NRUF/LNP database is provided pursuant to the protective orders issued in the AT&T/T-Mobile docket. Weir used the NRUF-LNP data to calculate individual Herfindahl-Hirschman Index ("HHI") values for each EA to measure both the absolute level of market concentration resulting from the merger, as well as the magnitude of the change. The FCC Staff, using the same methodology as suggested in the Weir Declaration, finds that the merger would result in substantial increases in concentration nationwide:

"Based on the number of connections, the post-transaction HHI would be above 2800, with a delta HHI of more than 100, in 95 of the 100 most populous CMAs, and the change in HHI would exceed 250 or more regardless of the level in 93 of the 100 most populous CMAs[.] Overall, as described above, 99 of the Top 100 CMAs trigger the HHI screen."

The Staff Report also finds:

- that the proposed transaction raises significant competitive concerns in the mobile wireless markets due to the increased likelihood of unilateral and coordinated effects;

- that the record raises substantial and material questions of fact relating to the competitive effects the proposed transaction would have in the markets for roaming, wholesale and resale services, backhaul, and handsets/devices;
- that the economic model on which the Applicants base their claim that the proposed transaction would result in lower wireless industry prices is flawed in terms of its structure and input assumptions, and therefore does not provide a sufficient basis for the Applicant's claims;
- that the Applicants have not demonstrated that most of the other cost synergies, such as savings in general and administrative ("G&A"), capital, and customer acquisition expenditures, are likely to get passed on to consumers; and
- that the Applicants have not provided adequate support for other claimed public interest benefits and these claimed benefits thus should not be recognized by the Commission.

The entire FCC Staff study is available for download at <http://www.econtech.com/library/FCCStaffAnalysis-ATT-TMO.pdf>



### *AT&T's Response*

The anti-merger findings of the FCC Staff study were not lost on AT&T, nor did AT&T waste any time in responding to the FCC study. Jim Cicconi, AT&T Senior Executive Vice President of External & Legislative Affairs, and the head of the lobbying effort behind the proposed merger, made AT&T's feelings perfectly clear in another blog post:

"We expected that the AT&T-T-Mobile transaction would receive careful, considered, and fair analysis. Unfortunately, the preliminary FCC Staff Analysis offers none of that. The document is so obviously one-sided that any fair-minded person reading it is left with the clear impression that it is an advocacy piece, and not a considered analysis.[...] We have summarized here only a portion of the infirmities we see in the FCC's report. We would encourage all observers to read the report itself."

This seems like a particularly odd position for AT&T to take, given that AT&T was willing to gamble \$6-billion that the FCC would be similarly one-sided in favor of the transaction. The lengthy response has been described across the blogosphere as a bit of a temper tantrum. Indeed, AT&T's acerbic and accusatory tone cannot be helpful should it continue its acquisition efforts, eventually requiring the transaction to come back to the FCC for review and approval. (Indeed, FCC approval will also be required for the transfer of spectrum licenses from AT&T to T-Mobile.) The full text of AT&T's response is available online at:

<http://attpublicpolicy.com/wireless/att-response-to-fcc-staff-report/>

Sprint, one of the most vocal opponents of the proposed transaction, quickly responded to AT&T's tirade with its own thoughts about the FCC Staff Report:

"The FCC staff's Analysis and Findings provide a careful, substantive analysis of AT&T's proposed takeover of T-Mobile, consistent with the FCC's role as the independent, expert agency responsible for such merger reviews. Rather than accept the expert agency's Analysis and Findings, AT&T has chosen to make baseless claims about the FCC's process. Let's not forget that it

was AT&T who tried to game the process by requesting to withdraw its merger application in the pre-dawn hours of Thanksgiving. AT&T can't have it both ways: either it wanted to have an application that would be judged on the merits or it didn't. We agree with AT&T on one point however: the public should read the Analysis and Findings on AT&T's proposed takeover."

While Sprint's rejoinder reflects a certain satisfaction in the outcome at the FCC, it will be interesting to see how satisfied Sprint really is should it ever find the need or desire to be party to a wireless merger of its own.

### *The Break-up Fee*

The required breakup fee of \$3-billion in cash and an equivalent amount of wireless spectrum (AT&T has carried the value of this spectrum on its books at only \$1-billion) is certainly substantial, but its importance depends upon perspective. For T-Mobile, \$3-billion in cash represents 14% of the company's entire 2010 revenues, and is more than double TMO's 2010 net income. In fact, Deutsche Telekom's principal motivation for putting T-Mobile on the block was that it no longer had any interest in providing the additional capital required to run its US wireless subsidiary. The break-up fee would represent a much needed capital infusion that could allow T-Mobile to operate independently *and* to expand its 4G footprint. While carrier claims of spectrum scarcity are certainly in dispute (as discussed in detail in the FCC Staff Report), it is clear that this additional spectrum would allow T-Mobile additional room to reconfigure its spectrum assets as it migrates to advanced 4G services. The break-up fee is an undeniable boon for T-Mobile.

On the other hand, T-Mobile has not fared too well in recent months. It began losing customers even before the proposed merger was announced, and in the eight months since it was announced the company has shed some 467,000 subscribers. In theory, parties to a major merger of this type are supposed to operate "as if" the merger were not taking place until actual approval is obtained, but this is difficult in practice. For example, up until the time of the merger announcement, the core of T-Mobile's marketing campaign – with the girl in the pink dress – was targeted specifically at AT&T and why T-Mobile offered a better deal and lower prices than AT&T. But almost immediately after the ink was dry on the merger agreement, T-Mobile eliminated all mention of AT&T in its TV and print advertisements. The pendency of the merger may well have caused T-Mobile to modify its network expansion priorities to the extent that post-merger considerations, rather than immediate competitive concerns, influenced its decisionmaking. Some portion of the break-up fee may be needed just to make up for these losses.

The consequences for AT&T are less clear. AT&T has already earned \$86-billion in revenue in 2011, and generates well over \$10-billion in free cash flow annually (\$13.5-billion FCF in 2010). Still, AT&T is on the hook to pay its annual \$10-billion dividend (the bulk of its free cash). The break-up fee does represent 30% of what AT&T returns to investors in a year, and the dividend *plus* the break-up fee may well represent close to 100% of the company's free cash flows for 2011. We agree with

analysts that don't foresee AT&T failing to pay its dividend, but this event may prompt AT&T to slow investments and/or to dip into its revolving credit facilities to meet cash requirements. The loss of electromagnetic spectrum cannot be good for AT&T either. While it is unclear whether AT&T's claimed spectrum drought is real, there is no debate that more spectrum is better than less, and giving up any amount of spectrum to T-Mobile will be a loss for AT&T. It's hard to imagine that AT&T would have ever agreed to \$6-billion cash and spectrum giveaway if its management had had any misgivings as to the certainty of regulatory and antitrust approval. If that does not materialize, the merger idea may well prove to have been a serious error in judgment by AT&T's management and Board.

### **Time for "Plan B"**

With all of the clear negatives of the increasingly less likely transaction and the direct ramifications of its failure, AT&T has also raised the specter of another option: a joint venture with T-Mobile. Rather than take over the smaller company, AT&T and T-Mobile would each contribute network assets to a joint venture. AT&T is still pursuing the takeover transaction, but alternatives are clearly brewing. Details on this workaround scenario are just beginning to surface, and it is unclear whether the companies themselves have fully defined the nature of such an effort. But regulatory approval of such a move is hardly a slam-dunk. If the FCC and the Department of Justice view the merger as diminishing competition by eliminating a competitor, a joint venture – which could be seen as a type of agreement not-to-compete – could instill a similar government response. Moreover, unless AT&T is prepared to actually invest money in a T-Mobile that it does not own, the joint venture scheme will do little to accommodate Deutsche Telekom's efforts to limit its capital spending to Europe. Presumably, AT&T is also working on a "Plan C."

## **FCC Intercarrier Compensation Order: Boon or Bust for VoIP Providers?**

The long-awaited order ushering in comprehensive reform of Universal Service Funding (USF) and Intercarrier Compensation (ICC) finally hit the presses on November 18, 2011. At 750 pages, the order isn't exactly light reading – the executive summary alone goes through page 16. Of particular interest is the FCC's treatment of intercarrier compensation for so-called "VoIP-PSTN" traffic.

The FCC has promulgated these new rules in an attempt to promote a shift to an all-IP environment, and to clarify widespread uncertainty and disagreement regarding intercarrier compensation for VoIP traffic. But rather than provide clarity and certainty, the Commission has generated additional unknowns, and has force-fit its aging TDM compensation regime onto existing and emerging IP services that are not well suited to traditional distance- and jurisdiction-based access charges.

Most long distance or "interexchange" calls are subject to FCC- or state PUC-regulated "switched access charges" imposed at both the originating and terminating ends of the call by either an incumbent or a competitive local exchange carrier (ILEC or CLEC). However, the requirement that VoIP providers pay access charges when they hand-off a VoIP-originated call to a TDM carrier for termination to the called party has been ambiguous at best, and up to now the FCC has

generally not enforced such a requirement. That is about to change. The immediate effect of the newly-adopted rules will almost certainly be negative for VoIP providers, driving up the prices for what are generally referred to as "interconnected VoIP services" – i.e., where one end of a call either originates or terminates in TDM at an ILEC or a CLEC.

Where a call both originates and terminates as VoIP – even where different VoIP providers are involved – there are no access charges to pay, and that will not change under the new ICC rules. The differential treatment of calls that never touch any legacy TDM carrier gives them a significant cost advantage, one that may ultimately be reflected in differentiated pricing for VoIP-VoIP vs. VoIP-TDM traffic. ILECs – which had been pressing the FCC to require that *interconnected VoIP* calls be subject to access charges – might now experience even faster traffic erosion than in recent years. The old adage, "be careful what you wish for, you might get it" may well be the unintended consequence of the ILECs' push for "parity" treatment of VoIP-TDM and TDM-TDM calls. If VoIP providers translate the cost advantage being afforded VoIP-VoIP traffic into lower prices for such calls, the result could be to accelerate the migration to VoIP, especially among business and enterprise customers.

### **VoIP-PSTN Traffic**

The FCC's new intercarrier compensation rules for VoIP apply only to the exchange of VoIP traffic between a Local Exchange Carrier ("LEC") and another carrier where the traffic involved is so-called "VoIP-PSTN" traffic. The FCC defines such traffic as

traffic exchanged over PSTN facilities that originates and/or terminates in IP format. In this regard, we focus specifically on whether the exchange of traffic between a LEC and another carrier occurs in Time-Division Multiplexing (TDM) format (and not in IP format) [...]

In other words, the new rules apply only where the IP traffic is exchanged with providers that utilize legacy TDM facilities (and significantly, not to situations where the exchange is accomplished entirely in IP form). Calls that originate from a legacy carrier such as AT&T and terminate at a subscriber served by a VoIP provider (e.g., Vonage) qualify as PSTN-VoIP. Similarly, calls that originate in IP format and terminate on legacy PSTN facilities also qualify as VoIP-PSTN. Calls between two IP voice providers, even when they use North American Numbering Plan ("NANP") PSTN-style telephone numbers, do not fall into this category because they never touch the PSTN, and are not subject to the new compensation regime.

### **The New Rules for Voice over IP**

The FCC summarizes the changes as follows:

- We bring all VoIP-PSTN traffic within the section 251(b)(5) framework;
- Default intercarrier compensation rates for toll VoIP-PSTN traffic are equal to interstate access rates;
- Default intercarrier compensation rates for other VoIP-PSTN traffic are the otherwise-applicable reciprocal compensation rates; and

- Carriers may tariff these default charges for toll VoIP-PSTN traffic in the absence of an agreement for different intercarrier compensation

First, the Commission effectively eliminates the pricing distinction between access charges and reciprocal compensation rates by governing all traffic under § 251(b)(5), including intrastate access. Interstate and intrastate toll traffic is to be terminated at current (capped) interstate access rates, and all other traffic is to be terminated at current (also capped) recip comp rates. Carriers can tariff these charges, but can negotiate separate interconnection agreements if they so choose. These rates will all eventually decline over the next several years, first to \$0.0007 per minute (the current reciprocal compensation rate applicable to ISP-bound traffic), and then eventually to zero as all telecommunications services transition to a “bill and keep” regime.

The structure of payments is symmetrical, and is applicable both to VoIP and TDM carriers. Any carrier that is advantaged by lower VoIP-PSTN rates when their end-user customers’ traffic is terminated to other providers’ end-user customers are also restricted to charging the lower VoIP-PSTN rates when the other provider’s traffic is terminated to their end-user customers.

#### *An end to all intercarrier compensation disputes? Not so fast...*

Although the FCC promotes this new framework as a panacea to end all of the uncertainty surrounding VoIP and intercarrier compensation, it seems unlikely to put an end to all of the disputes: For example, the Commission has left unanswered the question of how the toll/non-toll jurisdiction will be determined. Under existing rules, calls that are originated or terminated to a wireless carrier are considered “local” and subject to local reciprocal compensation treatment as long as both endpoints of the call are within the same “Major Trading Area,” an expansive geographic region that in some instances embraces several entire states. With the exception of calls that stay within a wireline LEC’s “local calling area” (usually within an 8 to 20 mile radius), those same *wireline* intraMTA calls would be treated as “toll” and subject to higher access charge parity rates.

For most wireline calls, the local/toll designation and state/interstate jurisdiction has traditionally been determined by geographic rating points associated with the calling and called telephone numbers based upon their respective area codes (NPAs) and central office codes (NXXs). This has become increasingly problematic in recent years, as the growth of nomadic VoIP, wireless, and other number-using services has largely de-linked the NPA-NXX codes and the physical locations of the endpoints of a call.

To address this problem, the FCC in its Order has declined to mandate the rating of an IP call based upon the calling party telephone number, but does not actively provide an alternate standard or method that could be utilized. In fact, the FCC leaves it up to the “LECs to address this issue through their tariffs,” which sounds like an easy way to create a whole new spectrum of disputes, especially since the use of the calling party telephone number is not expressly prohibited either. Given the history of interconnection disputes, it seems unlikely that this *laissez-faire*, “work cooperatively” method will be a success.

Perhaps more importantly, IP-based services are inherently not tied to specific geographies, so force-fitting a jurisdictionally based intercarrier compensation regime onto a technology where it is

difficult, if not outright impossible, to determine geographic jurisdiction, cannot increase clarity. Consider these very likely scenarios:

- A customer of a nomadic VoIP provider (such as Vonage) living in Boston orders the service and is assigned a ‘617’ Boston phone number. A year later the customer moves to Chicago but retains his original Boston number, which Vonage allows him to do. If he then places a call to a friend in Chicago, is that a local or a “toll” call? If the determination is driven by the originating (Boston) phone number, the call would *appear* as “interstate toll” to the terminating carrier, when in fact it is an intrastate local call.
- The same Vonage customer, now living in Chicago, receives a call from a friend in Boston, dialed to the Vonage customer’s Boston phone number. To the caller, the call appears “local” even though it is actually being routed to and terminated in Chicago.

Because IP services can be used from virtually any Internet connection worldwide, and because it is inherently difficult to determine the geographic basis of an IP-based call, there are any number of likely convoluted routing options that will mislead any geographically- or jurisdictionally-based intercarrier compensation process. Almost all non-telephony IP services and applications are priced today in a manner that is not distance-sensitive nor based upon the jurisdictional location of the consumer. Consumers don’t pay extra to access a website that is hosted outside of their home city, state or country. E-mail doesn’t require extra “postage” to get to a distant location. Distance-sensitive costs are zero or so close to zero as to be immeasurable. Most retail wireless pricing has eliminated all distance and jurisdictional distinctions. Distance-based charges are a relic of ancient technology, and the FCC’s decision to maintain it for IP-based services seems more likely to frustrate the adoption of VoIP, rather than to promote it.

#### *Network Effects*

Eventually, intercarrier compensation will evolve to “bill and keep,” at which point these distortions will dissolve away and IP-based services will stand on their own as an alternative product. Bill-and-keep pricing emerged entirely without regulatory involvement among interconnecting Internet Backbone carriers, but here the FCC seeks actually to *retard* its adoption as a pricing standard for voice telephony via a transition that will last for some ten years, even where voice traffic is carried over the same Internet. That transition scheme – and the legacy wireline carriers it is intended to protect – will be undermined as the higher prices of VoIP-TDM calls operates to accelerate customer adoption of SIP and other IP-based voice services.

© 2011 Economics and Technology, Inc. All rights reserved.

**About ETI.** Founded in 1972, Economics and Technology, Inc. is a leading research and consulting firm specializing in telecommunications regulation and policy, litigation support, taxation, service procurement, and negotiation. ETI serves a wide range of telecom industry stakeholders in the US and abroad, including telecommunications carriers, attorneys and their clients, consumer advocates, state and local governments, regulatory agencies, and large corporate, institutional and government purchasers of telecom services.