

The Virtual Network

The Pros and Cons of Utilizing the Cloud

What Is SDN?

On the Road to NFV

Carrier Class Orchestration for Network Virtualization

The Truth about the IP Transition

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Chip Pickering is the CEO of COMPTEL and a former Congressman from Mississippi. Prior to his election, Pickering worked for Sen. Trent Lott (R-Miss.) and served as a staff member on the Senate Commerce Committee, where he helped shape the Telecommunications Act of 1996. Because of his role in drafting the 1996 Act, he became well known as a Congressional leader on telecommunications issues.

As the PSTN Evolves, Last Mile Access and Interconnection Remain Vital to Bringing Competitive Alternatives to Consumers

For competitive carriers, Internet protocol (IP) technology is nothing new. For more than a decade, new entrants have been delivering innovative and cost efficient services over their networks using IP technology. Now some large, legacy carriers have begun to more fully embrace the benefits of IP technology in their own networks, but they are using this technological innovation to attempt to circumvent the fundamental, pro-competitive principles of our nation's telecom laws upon which competition relies. These largest incumbent local exchange carriers (ILECs) seek to dismantle competitive policies and escape from oversight by both federal and state policymakers, claiming that they can be trusted to play fair with competitors. But this is not the case. The large ILECs still have all the inherent advantages of incumbency, such as bottleneck control over the only viable broadband connection to most of the commercial buildings in the country. As a result, the large ILECs have the incentive and opportunity to stifle innovation and competition, which will have a detrimental effect on consumers, particularly businesses.

As the Federal Communications Commission (FCC) addresses legal and policy questions surrounding the transition, it is critical for the agency to protect the fundamental tenets of the Communications Act – wholesale last mile access and interconnection obligations. These tenets remain vital if the Commission intends to continue fostering a competitive environment and delivering the benefits that result from it.

Why Competition Matters?

During the past three decades, competitive policies have driven the communications revolution and brought us into the Information Age. Competition fosters innovation; gives small and mid-sized businesses, as well as residential consumers,

access to new services and applications; drives economic growth and job creation; and encourages investment.

Competitors have been at the forefront of innovation and investment, introducing IP-based networks and delivering managed VoIP services to customers for the past decade. In fact, according to the FCC, in the business market alone, competitors have nearly 10 times the number of VoIP lines as incumbent telcos. Competitors are leading, too, in deploying cloud services, Ethernet offerings, commercial DSL and unified communications solutions. On the investment front, non-ILEC investment in 2012 was 43 percent of total wireline expenditures, according to a 2013 report on the broadband market. And COMPTEL members report spending between 12 percent and 25 percent of revenue on capex in the first three quarters of 2013.

Access & Interconnection: The Two Pillars of Competition

There are two necessary elements required to enable continued growth of competition and benefits to end users: last mile access and interconnection.

The FCC's National Broadband Plan noted that the "nation's regulatory policies for wholesale access affect the competitiveness of markets for retail broadband services provided to small businesses, mobile customers and enterprise customers." However, as the FCC acknowledged, its current approach is a "hodgepodge of wholesale access rights and pricing mechanisms that were developed without the benefit of a consistent rigorous analytical framework."

While the Telecom Act takes a technology-neutral approach to competition policy, the FCC's implementation of last-mile access provisions have not. The FCC's

competition policies generally only apply to the old technology, so that a simple change from older technologies to IP allows ILECs to escape oversight. And this, simply stated, puts competition at risk. The FCC's access rules should not vary by whether the facility or service operates using circuit or packet-switched mode or if the underlying infrastructure is copper or fiber. As the industry transitions from TDM to IP, consumers will be negatively impacted by the FCC relieving the ILECs of their obligations that ensure reasonably priced non-TDM based packet-switched and optical broadband services. Similarly, the FCC has altered critical aspects of unbundling obligations adopted by Congress, allowing ILECs to retire copper loops and not requiring them to offer functionally and similarly priced alternative wholesale products.

By eliminating these ILEC obligations to provide wholesale access to critical last mile facilities and services, the FCC is putting competition in jeopardy. Regardless of the network infrastructure being used, the last mile continues to be vital to competitive providers for reaching their customers. The evolution to IP technology does not allow competitors to bypass the large ILEC last-mile bottleneck, where it is not economically viable to overbuild that network. Despite the rhetoric that the IP transition is resulting in a "new network," the fact is that IP is just a software protocol – not a new physical network – that can run over copper, fiber or wireless facilities, in the same way TDM has done for decades. Thus, the advantages of incumbency still persist for large incumbents in terms of access to capital, rights-of-way, a large base of end users, an extensive ubiquitous network footprint and the economic advantages that come with that level of economies of scale and scope.

Moreover, the IP transition does not eliminate the need for all carriers to be able to interconnect their networks in a manner that ensures all voice calls can seamlessly reach their intended parties. Nor does it eliminate the inherent advantages of incumbency in negotiating IP interconnections agreements. Efficient IP interconnection for voice services on an IP basis -- between incumbents and competitors alike -- on just and reasonable terms, will drive cost efficiencies and spur even more development of innovative services.

Based on our members' experience operating IP networks, there are very few technical challenges to being able to interconnect IP networks. The hold-up is getting good-faith interconnection negotiations with the largest ILECs. During the IP transition and beyond, the FCC must reaffirm the Telecom Act principle, which requires incumbent providers – such as AT&T and Verizon – to interconnect with requesting carriers at any technically feasible point in their network, on rates terms and conditions that are just, reasonable and nondiscriminatory. Once a reasonable IP interconnection agreement has been formed with the ILEC, that agreement should be made public so that all interested carriers seeking interconnection can opt in to those agreements.

As it proceeds with its examination of the IP transition, the FCC must keep at the forefront the importance of wholesale last mile access and interconnection, regardless of technology. Without these two fundamental tenets, the Commission will be unable to further its goals of ensuring end users can have competitive options for new, innovative services and that our country will continue to benefit from higher economic growth and job creation.



Based in Washington, D.C., COMPTEL is the leading industry association representing competitive communications service providers and their supplier partners. COMPTEL members are entrepreneurial companies driving technological innovation and creating economic growth through competitive voice, video, and data offerings, as well as the development and deployment of next-generation IP-based networks and advanced services utilizing fiber, copper and wireless facilities. COMPTEL advances its members' interests through trade shows, networking, education, and policy advocacy before Congress, the Federal Communications Commission, and the courts. COMPTEL works to ensure that competitive communications providers can continue to offer value pricing, better service, and greater innovation to consumers. COMPTEL's members create economic growth and improve the quality of life of all Americans through technological innovation, new services and affordable prices so customers have a choice.

