Another Big Bang for Telecom? 
Innovation Beyond the Next Generation Network
The More Things Change, The More They Remain the Same
Last Mile Access and Interconnection Remain a Constant Requirement with Next-Generation Networks

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For more than a century, a single provider – Ma Bell – was tasked with building our nation’s telephone network, which was comprised of copper wire, to carry our telephone calls. Much has changed in the last century. Most significant is the emergence of competition, which has sparked innovation and brought greater choice to businesses and consumers. While providers are installing fiber to accommodate demands for faster speeds and increased bandwidth, technological advances also make it possible to use the nation’s copper infrastructure to offer high-speed Internet and advanced services. At the same time, the public switched telephone network (PSTN) is in transition, moving from the historical circuit-switched (time division multiplexing, or TDM) to Internet protocol (IP) technology.

Regardless of the underlying network, or the technology used to move voice calls and data across those networks, certain fundamental rules addressing interconnection and access to last mile facilities continue to be necessary to ensure that consumers, small businesses and large enterprises can continue to benefit from competition.

Today, though, these issues have become a flashpoint as incumbent telcos seek to avoid their obligations for interconnection of IP networks and last mile access to fiber, under the guise that these “new” networks are not subject to “old” regulations. But changes in technology – regardless of how revolutionary they may be – do not change the fact that interconnection and last mile access are still needed to promote and protect consumers and their choice of competitors.

The transition of the PSTN to IP technology is just one of the many evolutions that have occurred in our nation’s core communications infrastructure over the years. These so-called “new” networks are anything but. Competitive carriers have been at the forefront of transitioning to IP networks for more than a decade, using both fiber and copper to deliver their services. In addition, many incumbent telcos are using their existing copper facilities to deploy IP technologies – not actually replacing the legacy network wires with something new.

Legally speaking, the FCC has found that a change in technology does not change the basic interconnection obligations of providers. But because technology is evolving at such a rapid pace, the agency has created an internal Task Force to explore the impact of changes on the network and the services on which consumers rely. Recently the Task Force issued a public notice seeking comment on three possible trials, which would focus on IP interconnection, next-generation 911, and the transition of residential consumers from wireline to wireless services. As the FCC explores these issues, it is important for the agency to ensure that resulting policies continue to promote effective wholesale competition, consistent with the goals of the 1996 Telecommunications Act, because with a robust competitive environment, consumers are best served by all providers continuing to innovate in the services they offer and the prices they charge.

Last mile access continues to be a hot-button issue, too. Competitive providers are utilizing the copper network to offer Ethernet over Copper (EoC) services, which is one of few ways that many small and mid-sized businesses can afford vital high-speed broadband services. Some large incumbents, however, are beginning to remove existing copper facilities over which the EoC services are provided. These actions leave no competitive alternatives, since the FCC has permitted incumbents to deny competitors access to alternative facilities, such as fiber, in a manner that enables the delivery of high-speed broadband services. Competitive providers face significant barriers to build their own last mile facilities. Despite the billions of dollars competitive providers have invested in infrastructure, they simply cannot replicate the scale of the large telcos, which have the advantages of incumbency to achieve cost savings unavailable to competitors.

To ensure that all consumers, small and mid-sized businesses, and even the largest enterprises can benefit from competitive next-generation technologies and services, it is vital that the FCC also develop modern, pro-competitive last-mile access policies that take into account the various methods by which communications providers can reach end users.

Even with the most advanced technologies, the lack of effective policies governing interconnection and last mile access will result in our nation facing a harmful reduction in competition and the benefits it makes possible. If so, we won’t be looking ahead for the latest, greatest innovations. Instead, we’ll go back to a time where there is very limited choice of providers, and consumers and businesses will see dramatically higher communications costs and fewer innovative new services, as well as the many other benefits that result from competition.

About the Author
Jerry James has more than 40 years experience in the communications industry. He started his career at Southwestern Bell and then worked as a management consultant for Coopers and Lybrand until he co-founded the telecommunications consulting firm The Warner Whitney Group Inc. in 1979. Then, as a senior executive of network operations at ClayDest Communications, James supervised the building of the first all-digital network in Texas in mid-1980s. He held other executive positions at other well-known communications companies until 2000, when he co-founded and served as president of Grande Communications, which constructed Texas’ first fiber-to-the-home network offering voice, data and video services via “triple-play” bundle. During his career, James has been active in policy advocacy at the local, state and federal levels. He helped found state associations for the competitive communications industry in several states, served on the boards of national trade associations and served as vice chairman and chairman of COMPTEL. James has served as CEO of COMPTEL since June 2007.