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Annual Privatization Report 2010: Telecommunications

By Steven Titch
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Part 1

IT Outsourcing Update: Problems and Solutions in Texas and Virginia

While IT outsourcing stands to save governments hundreds of millions of dollars and improve government operations, recent troubles in high-profile IT outsourcing projects in Texas and Virginia have some suggesting that state and local governments considering like moves should think twice. Some assert that turning over state-owned IT assets, even if they are aging and inefficient, to private companies can be akin to jumping from the frying pan into the fire.

But on closer examination, the challenges these states are having with their IT contracts resemble those experienced in the past by other states and cities. The scale and sums involved are higher, to be sure, but they are commensurate with the size of the states and their respective projects. And although the problems led to several months of bad press and fingerpointing, both states have taken constructive steps to regain control of the situation. The lesson learned by Texas and Virginia is that an outsourcing is only as good as the contract's specified outcomes and the customer's (the government's) ability to enforce the contract. Perhaps the most important elements leading to the success or failure of an information technology outsourcing or privatization project are governance and accountability of the process, combined with clearly articulated strategic goals.

The following subsections explain IT outsourcing, explore what went wrong in Texas and Virginia, and examine how those states are getting back on the road to cost savings and higher efficiency through better contracting governance.

A. What Is IT Outsourcing?

IT outsourcing generally entails a government entity contracting with a private sector company to manage the IT infrastructure assets of the state (or city or subdivision). Under the arrangement, a prime contractor manages procurement, integration, operations, maintenance and overall health of the IT infrastructure, as per the terms of the contract. The prime contractor also employs IT personnel and brings in subcontractors where needed. The government can either choose to retain

ownership of IT equipment—computers, servers, software and network hardware—or privatize these assets entirely, depending on the course of action the government desires. Structurally, government IT outsourcing is much like other forms of government outsourcing or privatization. Services are put up for bid, alternatives are evaluated, and a contract with a private sector provider is negotiated and signed. The only difference with IT is the scope.

And the scope is wide. Unlike roads, parks and recreation, and sanitation services, which typically are compartmentalized, IT operations touch the entire spectrum of government operations. Therefore, IT outsourcing projects can affect, directly or indirectly, almost every government employee. For example, the effect of a privatization of municipal golf courses is largely confined to actual golf course operations, suppliers and employees. Privatization of IT, on the other hand, cuts across departments and agencies, forcing changes in established job tasks and work processes. For example, if the government wants the IT contractor to set up a Web-based tee-time registration system in an effort to make services more Internet-friendly, suddenly the pro-shop employee, who once was responsible for handling reservations by phone and matching players to tee-times with paper and pencil, is required to learn a new, PC-based program for this task.

B. IT Outsourcing to Reduce Costs

As reported in Reason Foundation's *Annual Privatization Report 2009*, IT outsourcing is attractive for a number of reasons. To begin with, it consolidates and streamlines multiple and incompatible information systems. The same motivation drove the private sector to embrace outsourcing 10 to 15 years ago. While it had once made sense for different departments to use different types of systems, the emergence of the Internet protocol (IP) and other common connectivity standards led to a new generation of IT systems and applications that could operate on a common technology platform and thereby share capital-intensive resources, such as data centers and help desks, much more easily. Also, when systems and applications share a common platform, IT tools, processes and policies can be fairly uniform throughout a large organization. For a state government, this means the same IT staffer can troubleshoot a problem in one department, say the Department of Motor Vehicles, as well as another, say child services; in the past the two agencies used different and incompatible systems, each requiring its own specialist. Likewise, frontline employees who use the technology everyday do not have to be fully re-trained on a new system should they transfer across departments.

Such uniform, compatible information systems can be a major driver of cost savings, and together these factors are driving the proliferation of IT outsourcing. The state of Georgia, which is integrating the information systems of 11 agencies as part of an eight-year, $873 million outsourcing agreement with IBM, expects to save $180 million in IT costs over the life of the contract. In addition, states and municipalities wanting to use their IT resources to support online services, meet new requirements from the federal government, improve communications between state agencies, and maintain correct and up-to-date information in their databases, are finding outsourcing to be an effective solution.

C. Benefits Beyond Cost Savings

The rationale for IT outsourcing is often expressed in terms of cost savings, and most projects meet these goals. But in recent years cities and states are learning to balance savings with the value gained from operational efficiency, which is harder to measure. In other words, it is important not to judge a project purely by the amount of money it promises to save, but to add some strategic thinking to the mix. Savings remains important, but cities and states that have been through the process encourage IT officials to give more emphasis to long-term efficiencies that outsourcing and privatization create.

For example, Lynn Willenbring, chief information officer (CIO) of Minneapolis, told *Governing* magazine in June 2010 that many problems encountered when organizations try IT outsourcing stem from the fact that those in charge are looking specifically to save money instead of increasing overall organizational effectiveness. Short-term gains were valued over long-term productivity improvements. Willenbring recommended aligning the city's specific IT objectives with the appropriate sourcing model. "When we looked at [outsourcing], we were looking at it not as a cost-savings measure," she told *Governing*, "but as a way to shift away from some of the work that was keeping us from doing what we really thought we should in our IT department."

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D. Governance: Texas and Virginia Solve Contract Governance Problems

Along with accenting a strategic vision, states are also learning to assert better governance over their outsourcing deals. The governance and accountability issue has come to the forefront in Texas and Virginia, but these states are not the first to run headlong into it.

Indeed, governance problems threatened to derail an IT outsourcing project in San Diego County. Issues with the first contractor, CSC, led the county to drop the firm in favor of Northrop Grumman when CSC's contract expired. At the same time, San Diego County recognized its responsibility and changed the way it approached the project.

First, the county opened communications channels, spending several months talking with IT chiefs from individual departments and eventually drawing up a set of decision-making rules. Then, three formal groups were created to keep county managers, business groups and technology leaders on the same page: an IT Management Committee including the chief administrative officer, the HR director, and the county's general managers; a Business Process Governance Group including the chief financial officer and the county's finance directors, and an IT Governance Group, led by

current CIO Harold Tuck and including group IT managers, group finance directors and the county Technology Office.

1. Texas

Texas signed a seven-year, $863-million outsourcing deal with IBM in 2005, but delays, along with a temporary loss of eight months' worth of data from the Office of the Attorney General due to a failure on IBM's part to perform adequate back-up, led Gov. Rick Perry to halt the project and reassess it.

The agency tasked with overseeing the contract, the Texas Department of Information Resources (DIR), withheld $900,000 in payment to IBM until the back-up situation was remedied. IBM acknowledged the delays, but a 2009 Texas State Auditor's report criticized the DIR for failing to adequately oversee and verify IBM's performance. A DIR-commissioned study, performed by the management consulting firm EquaTerra, found that the governance provisions spelled out in the IBM contract were ineffective and inappropriate for keeping the massive outsourcing deal on track.

Governing magazine reports that Texas, like San Diego before it, is giving individual agencies stronger representation in, and more accountability for, its outsourcing initiative. Under Texas's new CIO, an executive committee of agency leaders now guides business direction for the initiative. Another committee of agency IT leaders, DIR representatives and contractors tackles technology issues. And a handful of working groups focus on specific aspects of the project like service delivery and program management.

The DIR is absolutely within its rights to demand project accountability from IBM. The issue here is not political; it's one of customer versus supplier. And far from a failure of the public-private partnership (PPP) process, if states and local governments can't feel comfortable playing "hardball" with contractors when they need to, PPPs won't succeed.

For example, if a contractor agrees in writing to remodel your kitchen in one week, and three weeks later, you're still up to your waist in ladders, paint cans and sawdust with no sign of countertops, cabinets and tile, you've got a legitimate grievance. On the other hand, despite the headaches and hassles of the delay, your dispute with the contractor is not a wholesale indictment of the idea of turning over a significant construction project to licensed professionals, nor does it prove that the remodeling job would have been faster, easier or less expensive if you had undertaken it yourself.

2. Virginia

In June 2009, a controversy involving contract governance erupted around Virginia's $2.3-billion IT outsourcing program, the largest such state program so far. The Virginia Information Technology Authority (VITA), the agency overseeing the project, fired the state's chief

information officer, Lemuel Stewart Jr., for withholding a $14.3 million payment to the state's prime IT contractor, Northrop Grumman, because certain goals had not been met on time. This action mirrors what any private party would take if a contractor had failed to perform as agreed.

In August, VITA named George Coulter to the post. Coulter's term got off to a rocky start when, three weeks into his position, he fired three subordinates who had been most critical of Northrop Grumman's work. The firings drew criticism from the Virginia legislature, as well as concern from some VITA directors.

Northrop Grumman indeed missed deadlines and had problems with implementation and transition. It is not clear whether Northrop Grumman used its leverage as a major Virginia employer to go over Stewart's head after he halted payment, or what, if anything, may have happened behind the scenes, but had VITA, which was apparently divided on the issue, backed CIO Stewart, who as an aggrieved customer was pressing a supplier for adequate resolution of a legitimate complaint, a lot of controversy could have been avoided.

Gov. Bob McDonnell appears to be interested in moving the program forward. The state recently passed a point in its contract where it could have either sued Northrop Grumman for failure to complete its work or terminated the contract completely. Instead the state will continue working with Northrop under a corrective plan the contractor submitted last year. According to the *Washington Post*, pushing it forward will be a major priority for Jim Duffey, Virginia's incoming secretary of technology, to whom McDonnell wants state CIO Coulter to report.

In the nearly five years since the contract was awarded, VITA has replaced 27,300 outdated PCs at 68 agencies, shifted more than 1,000 state websites onto a statewide network, standardized e-mail services, upgraded security measures, vastly improved data backup and storage, and implemented statewide support and help desk functions. More than 630 state IT workers have transitioned to the VITA payroll and now work out of a single $35-million, state-of-the-art IT facility in Chesterfield County. Another 430 mid-level tech jobs have been created at a $33 million VITA backup facility built in Southwest Virginia's Russell County. Savings are derived from facilities consolidation, standardization of hardware and software across departments, and gains in efficiency. Over time, these costs are far less than maintaining separate networks, data centers and aging, obsolete equipment and software for individual state departments.

It remains to be seen if McDonnell will be successful in reorganizing the CIO reporting lines, but the state and its taxpayers may be better served if the CIO operates at arm's length from both the governor's mansion and the legislature, reporting instead to an authority or department head.

What's important is that, in the end, both Texas and Virginia did not hesitate to act like the end-customers they were. IT privatization is a complex process, but complexity should not be an excuse for bad work. These contractors, after all, are the leading IT companies in the field. Expectations should be high and should be communicated well.

E. Cloud Computing: The Future of Outsourcing?

A more recent trend, in both enterprise and government, has been to move away from the use of dedicated hardware and software altogether, and turn to hosted services and concepts such as "cloud computing." Cloud computing involves software or an application that, instead of being stored and accessed on a PC hard drive or office server, is stored and accessed on the Internet. Precisely speaking, the software or application is resident on a server in a large data center that could be physically located just about anywhere. This arrangement offers even greater scope to outsourcing and privatization options. Above all, the outsourcing company is accountable for a successful IT transition, the effective function of operations, and the overall performance of the IT infrastructure.

Government IT managers are demonstrating growing interest in this emerging field, which can be considered a form of outsourcing. And while the term may still be unfamiliar to many, chances are that you already have used a cloud computing service. Hosted e-mail, such as Gmail or Hotmail, qualifies as cloud computing. So does a service like Google Analytics, which tracks website visits and page impressions. Other examples include Google Docs (word processing, spreadsheets, etc.), Salesforce.com (customer relationship management) and Constant Contact (marketing communications and contact management).

Cloud computing is also a game changer. Cloud computing saves money by eliminating maintenance, licensing and training costs while speeding service set-up. It can take four to six weeks to deploy an application on an enterprise server. A cloud-based server can cut that time by a factor greater than 30.

For example, Outback Steakhouse used Facebook, the social networking site, and a cloud-based service based on the Microsoft Azure operating system, to take a marketing idea from conception to implementation in less than eight weeks. In a guest lecture at Princeton University, Brad Smith, general counsel at Microsoft, said the restaurant chain created a fan page on Facebook and offered a coupon for a free appetizer to the first half-million people who became a "fan." As it did not make sense for Outback to create its own in-house server-based solution for such a narrowly focused application, it chose a cloud-based solution. Outback took the idea from conception to implementation in less than eight weeks, and 18 days later reached its goal of half a million fans. Afterward, the company was able to quickly move computing resources to something else.

Successes such as these contribute to the interest and enthusiasm surrounding cloud computing. According to a survey of consumers and businesses conducted by market research firm Penn, Schoen and Berland in December 2009, 58% of general consumers and 86% of senior business leaders are excited about the potential of cloud computing to change the way they use technology. The survey also found that the majority of all audiences believe cloud computing has the potential to help governments operate more efficiently and effectively.

Still, there are concerns about cloud computing, especially in regard to security. By definition, cloud computing stores data off-premises. The security of the data is only as strong as the third-party's own safeguards. That's why, despite the enthusiasm, the Penn survey found that a majority of business leaders feel there is a rush among companies and governments to adopt cloud computing without considering all the ramifications. More than 60% of general consumers and more than 75% of senior business leaders surveyed believe data safety, security and privacy are top potential risks of cloud computing. And, as they think about storing their own data in the cloud, more than 90% of the general population and senior business leaders are concerned about the security, access and privacy of that personal data.

While the potential benefits are too great to eschew cloud computing, states should be diligent about how they use it. Working with an outsourcing companies that offer cloud computing applications demands thorough cost-benefit, high-grade security and data protection analyses. Ultimately, however, cloud computing can change outsourcing by providing governments with greater flexibility and more choices concerning IT services. States and cities may no longer feel they have to dump all their IT eggs in one outsourcer's basket. Rishi Sood, vice president of research at the IT research consulting firm Gartner, coins the term "multisourcing."

"State and local budgets are tight, and agencies look to modernize their major applications," Sood told *Governing* magazine. "I think you'll see a growing trend toward application outsourcing. So rather than whole sourcing, they'll be taking a look at specific towers again and looking to outsource only a piece of that tower."

Part 2

Network Neutrality Update

Late December of 2010 saw the Federal Communications Commission adopt network neutrality rules after more than a year of intense debate. It remains to be seen whether the new rules—which fulfill a Barack Obama campaign promise—bring this policy dispute to a close or simply serve to open a new chapter.

The new rules, which the FCC adopted December 21 with a 3-2 vote, are something of a compromise. Chiefly, they introduce a so-called "non-discrimination rule" that will require Internet service providers (ISPs) to treat all data the same as it crosses their networks, no matter what application the data is supporting. The new rules, however, permit "reasonable network management," although the FCC's definition here is vague enough that any neutrality exemptions the FCC grants on these grounds will likely appear arbitrary. The two Republican commissioners, who view network neutrality as the introduction of intrusive regulation to the Internet, have opposed the rulemaking from the start. Meanwhile, FCC Chairman Julius Genachowski's two fellow Democrats, while voting in favor of the rules, qualified their assent by declaring the rules did not go far enough, particularly because they exempt wireless networks from the non-discrimination rule.

With adoption of the new rules, however, the FCC has shelved its proposal to reclassify broadband telecommunications services under Title II of the Telecom Act. This action would have, for all intents and purposes, subjected ISPs to the type of strict regulation once reserved for monopoly telephone companies. Congress has categorized Internet and broadband as competitive information services, and therefore subject to far less regulation.

The FCC proposed reclassification came in the wake of a federal court of appeals ruling that blocked its attempt to fine Comcast Corp. for an alleged network neutrality violation. In the ruling, the court said the FCC, under the law, had no authority to regulate the Internet. That decision could come into play in the future if an ISP chooses to challenge the FCC over net neutrality enforcement. The new Congress may also attempt to counter neutrality regulations through legislation.

That the adopted rules stop short of the more sweeping regulations proposed in October 2009 reflects the FCC's frustration with implementing a stronger network neutrality policy it had once envisioned. The network neutrality principle stipulates that Internet service providers should treat all data traffic the same way as it moves through their networks. While the neutrality principle has largely guided ISP practices in the years the Internet developed, many technology analysts question

whether the net neutrality principle should be given the force of law. The fear is that if ISPs were prevented from managing, partitioning and prioritizing certain types of data, particularly voice and video—where quality depends on timely, error-free transmission—consumers would suffer from slow and degraded services.

Genachowski, along with neutrality's most vocal advocates, had expected most of the Internet industry to line up against the large ISPs, namely AT&T, Verizon and Comcast, which were perceived as the sole opponents of the new rules. Indeed, only a few years back, large content, applications and e-commerce companies such as Google, Apple, Microsoft, eBay and Amazon.com had been pro-neutrality. But when Genachowski's commission began its rulemaking process on the matter in 2009, most of these companies began to openly state their worry that neutrality regulations could end up doing more harm than good.

Even with the FCC's compromise measure, concern remains about the effect it will have. The new rules could give the FCC the power to regulate business and consumer Internet prices—a practice that government agencies in general have moved away from over the past several decades, acknowledging that, in the long term, price controls hurt consumers and the economy.

The vagueness of the rules could also allow current or future FCCs to exert regulatory control over business relationships between ISPs and their suppliers of core network hardware and software, end-user equipment, such as smartphones, iPads and eBook readers, and content and applications companies that provide tools to various consumer information platforms. Critics fear that any technology or business model that served to improve Internet performance of any application, whether proposed in a boardroom of a large corporation or hatched in a garage workshop, would have to undergo a "Mother, May I," test. The concern is that FCC bureaucrats would decide which Internet services, applications and technology get to market. Thus investor interest, venture capital dollars, market research studies, or simply the passion of one person with a vision, would be severely diminished.

A. How We Got Here

The network neutrality debate has been festering in the FCC and Congress since 2005, when the FCC issued the set of network neutrality guidelines that serve as policy today. The guidelines state:

- Consumers are entitled to access the lawful Internet content of their choice.
- Consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement.
- Consumers are entitled to connect their choice of legal devices that do not harm the network.
- Consumers are entitled to competition among network providers, application and service providers, and content providers.

As of early fall, phone and cable companies, along with major Internet content and applications providers, were signaling readiness to compromise on action that would codify these four guidelines into rules.

However, Democratic commissioners, in the minority during the Bush administration, along with allies in Congress such as Rep. Edward Markey D-Mass., chairman of the House Telecommunications Subcommittee, continue to press for a fifth, much more controversial "non-discrimination" guideline, namely to prohibit ISPs from using any means to improve the speed or performance of any Internet application. Such a guideline would prohibit AT&T, for example, from offering a video provider such as Netflix, a prioritized channel with a guaranteed amount of bandwidth to stream video to Netflix subscribers, whether or not Netflix compensated AT&T for the service.

The network neutrality debate broke down along party lines: Democrats in favor; Republicans against. Barack Obama endorsed the idea when speaking at Google's headquarters during his campaign. Obama's choice for FCC Commissioner, Julius Genachowski, proved to be an ardent supporter for the non-discrimination principle. Among his first major actions after being confirmed was to open a proposed rulemaking to add non-discrimination into network neutrality and to codify the guidelines into rules.

B. Fear of Internet Censorship

The primary policy force behind network neutrality was to counter a perceived threat that ISPs, through control of the local exchange bottleneck, could block or otherwise slow connections to websites that ISP corporate management found unfavorable. Reasons could be commercial, political or cultural.

John Nichols, a columnist for Madison, Wisconsin's *Capital Times*, made this argument in a 2006 column, suggesting that without a network neutrality rule, an ISP could favor WalMart by allowing users to reach its site in an instant, but throw up technical barriers to the WalMart Watch site so that users would "have a hard time" visiting the retailer's watchdog group.

The putative censorship danger attracted some high-profile publicity to the network neutrality cause. Videos from four years ago, predicting the imminent "Death of the Internet," can still be viewed on YouTube.

Free market advocates, however, point out that four years later, in 2010, these dire predictions have not come true. Quite the opposite, as the last four years have seen an explosion in new types of Internet applications, particularly in social networking (Twitter, Facebook) and wireless (iPhone, Android) and services that mash-up both (Web 2.0). While the ISPs are a fairly concentrated group, they do not have an ironclad grip over Internet development. In fact, they arguably remain vulnerable to the continuing onslaught of disruptive technology the Internet and broadband fuels.

Meanwhile, proponents repeatedly fall back on the same two neutrality complaints that have come before the FCC in the past five years. The first, which involved an attempt by Madison River Communications to block Vonage, the provider of voice-over-Internet protocol phone calling, was upheld. Madison River was fined. The second, a complaint that Comcast had intentionally slowed file transfers using the BitTorrent protocol, which the FCC chose to press even after Comcast and BitTorrent settled the issue, sent the entire network neutrality effort off the rails.

C. The BitTorrent Aftermath

BitTorrent is a file transfer protocol, that is, it is a specific way of encoding data, particularly large files such as videos and games, for transmission across the Internet. The way the BitTorrent protocol works is it will try to consume all the available bandwidth it can on a link. This is harmless when demand for bandwidth is low. But when demand for bandwidth increases—when more users come online at the same time—the BitTorrent protocol will not yield back any of the capacity it has taken.

Another wrinkle in the case is that less than 5% of Comcast customers were using the BitTorrent protocol. But, because of the protocol's inherent characteristics, these customers were consuming most of the available bandwidth. So the company took steps to slow down the rate of BitTorrent file transfers on behalf of the great majority of its customers. BitTorrent filed a complaint, but the two companies resolved the issue amicably.

Despite the agreement, the FCC, then under President Bush's Chairman Kevin Martin, ruled the BitTorrent affair a net neutrality violation. Comcast took the FCC to court, citing precedents such as *FCC v. Brand X*, and claiming that as a private company it was within its rights to control the way third parties—its customers—used its property. When he took over the FCC, Genachowski pressed on with the case. The FCC lost—badly.

In April, the U.S. Court of Appeals for the D.C. Circuit ruled that Comcast had not only violated the FCC's network neutrality guidelines, but that the FCC's attempts to regulate broadband through concepts like network neutrality *were outside its ancillary jurisdiction*. In short, the Court said that the FCC would need a specific law or amendment from Congress in order to impose the network neutrality regime it so eagerly seeks.

The FCC's response was to raise the stakes, going all-in with its reclassification plan, trying to awkwardly shoehorn ISPs into a regulatory environment designed for monopoly dial-tone telephone services. That move, however, was opposed by a general cross-section of the U.S. telecom and Internet industry, which had already started to re-evaluate network neutrality altogether.

D. A Fracturing Coalition

In the past several years, Microsoft, Apple and eBay have slowly moved away from the radical network neutrality front. Back in 2007, CNET's Declan McCullagh identified "a fragmenting coalition," as one of the ten things that "killed" network neutrality. The major pro-net neutrality coalition, It's Our Net, boasted 148 members in 2006. A year later, it "reconstituted in a different form," as the Open Internet Coalition, but with just 74 members. Among the one-time supporters now missing, according to McCullagh, were Adobe, Amazon.com, the Business Software Alliance, Expedia, Intel, Microsoft, Sony and Yahoo.

The network neutrality coalition continued to fracture, especially as companies that once thought they were safely outside Washington's regulatory reach pondered the implications of how reclassification would mean a lead to a much more regulated Internet. As late as October 2009, Amazon.com was still nominally in favor of network neutrality, joining calls to vaguely define "open Internet." But in a guest column on CNET in July, Paul Misener, vice president for global public policy at Amazon.com, for all practical purposes reversed his company's stand on network neutrality, particularly the controversial non-discrimination rule, which would prohibit ISPs from creating and charging providers of large-scale content, applications and commerce for faster broadband connections and tiered quality of service.

Significantly, Misener conceded that censorship never materialized. "First, there have been almost no net neutrality violations," he wrote. Then, he addressed the chilling effect the call for Internet regulation posed for investment—and the detrimental impact it will have on everyday users. "Second, the legal/regulatory uncertainties have, understandably, dissuaded network operators from making investments in new technologies and services that might subsequently be found to violate Net neutrality. Unfortunately, some observers seem to think that this uncertainty hurts only the network operators and their suppliers, but consumers and content providers also are suffering, albeit unwittingly, from the lack of new services that might otherwise be available."

Internet regulation also runs against popular sentiments. The results of an April Rasmussen Reports poll found that 53% of Americans oppose FCC regulation of the Internet. Among those who say they use the Internet every day or nearly every day, that number jumps to 63%.

Still, reclassification and network neutrality are not hot-button issues with the American public. In the political sphere, AT&T, Verizon and Comcast are not "glamour" companies. But Apple, Amazon.com and Google are. Critics of current White House economic policy, such as the Business Roundtable, have already claimed that the current zeal for regulation is adversely affecting jobs, investment and opportunity, consequences that could be felt even more keenly in the heavily entrepreneurial IT and Internet sectors. While legislation to rein in the FCC is a long shot, a more cautious Congress might try to put the brakes on extending any neutrality regulation, or at least demand a much more thorough rationale from Genachowski as to why such a drastic step is necessary.

Part 3

FCC Issues National Broadband Plan

In March 2010, the Federal Communications Commission (FCC) released its National Broadband Plan, setting a broad, sweeping and ambitious agenda for the U.S. telecommunications and information technology industry. While there is general consensus on its goals—greater access to broadband, faster evolution of wireless services, greater competition and lower barriers to entry—the policies outlined in the plan call for the federal government to take a much stronger role in directing and managing the way the U.S. technology industry addresses these issues. As such, the plan has generated considerable controversy.

The 360-page document, reportedly reflecting the vision and ideas of FCC Chairman Julius Genachowski, imagines a major expansion of government into the business of broadband technology, services and content—including the regulation of broadband business models, website information-gathering, Web content and the funding of digital media companies—areas previously outside the FCC's traditional regulatory purview.

The National Broadband Plan puts forth some 200 recommendations, and the FCC is planning some 40 Notice of Proposed Rulemakings (NPRMs) related to the plan. Several proceedings, including inquiries into universal service reform, nationwide mobile connectivity and data roaming, and video set-top box technology are already underway.

The National Broadband Plan, available for download at www.fcc.gov, lists six overarching, long-term goals to be reached by 2020:

- It aims for 100 megabit-per-second (Mb/s) service, currently achievable with fiber-to-the-home platforms such as Verizon's FiOS, to 100 million homes.
- It calls for U.S. leadership in mobile innovation, with the fastest and most extensive wireless networks of any nation.
- It calls for affordable, robust broadband access to every American.
- It calls for a nationwide, wireless, interoperable broadband network for public safety and emergency response.
- It seeks a minimum of 1 gigabit-per-second (Gb/s) aggregate bandwidth to every American community by 2020. While most cities and towns have far more than this today, this goal is primarily aimed at rural communities in order to deliver quality broadband to larger

institutions—hospital, schools and factories—that can anchor local consumer broadband growth.

- It states that every American should be able to use broadband to track and manage his or her real-time energy consumption.

To achieve these goals, the plan suggests numerous policy initiatives for the FCC, Congress and state and local governments to consider, ranging from general to specific. Many are aimed at closing the broadband service gap that exists between urban and rural areas, as well as the gap in broadband adoption between low-income households and middle- and higher-income consumers.

As a document, the national broadband plan reveals a solid understanding on the FCC's part of the impact broadband has on the U.S. economy and the impact it has had in American life. This is a welcome change from the regime of the previous Chairman, Kevin Martin, who seemed preoccupied with regulating broadcast and Internet content for indecency, and expanding regulation over cable companies. Overall, however, after years of the FCC's attempts to regulate the business as if it still existed in the legacy silos of yesteryear—local vs. long distance, wireline vs. wireless, dial-up vs. broadband—its broadband plan seems to grasp how the new ecosystem of Internet companies, service providers, content providers, software developers and device makers form a diverse yet functionally interdependent group.

There is also a strong understanding, even endorsement, of the role of wireless in broadband development. In the past, wireless has been approached by policymakers as a second-rate service, hence the reluctance to extend Carrier of Last Resort requirements to wireless service providers. WiFi and 3G wireless were seen as "poor man's" alternatives to DSL and cable modems. With the introduction of platforms such as the iPhone, Android and WiMax, as well as the advent of Web 2.0, which builds on the way the Web can interact with mobile devices, the FCC has acknowledged inherent value in mobile and wireless broadband.

Broadly, the Federal Communications Commission's National Broadband Plan calls for policies to ensure robust competition. It also aims to ensure efficient allocation and management of assets the government controls in a way that encourages upgrades and competitive entry. These assets include spectrum, public rights-of-way and utility poles.

Central to the plan is a new universal service mechanism called the Connect America Fund (CAF) that would subsidize broadband deployment in unserved or underserved areas. Over a ten-year period, CAF would replace the current high-cost and low-income funds that today make up the majority of Federal Universal Service Fund subsidies. These funds tend to support narrowband dial-tone service, which consumers are abandoning in greater numbers for wireless and broadband alternatives.

Lastly, the plan seeks to update federal and state policies to incentivize these goals and increase the attractiveness, value and benefits of broadband for the government, education, health care, energy and public safety sectors.

The plan, however, also reflects a philosophy that there is no sector of the economy that a concentrated application of government action cannot improve. The National Broadband Plan aims to close the broadband gap with a centrally planned industrial policy that touches all points of the commercial Internet ecosystem. Yet, it is difficult to argue that the entire Internet industry, which has remained strong despite the recession, is dysfunctional. Hence, to justify its proposals, the plan severely downplays the role the private sector has had in broadband expansion to date. While it acknowledges that 95% of U.S. households have access to broadband, it makes an unsusbstantiated assumption that private sector investment has reached its limit and that government support is needed in order to reach the last 5%.

To do so, the plan revisits policies that have not worked in the past. Of particular concern is that it endorses the concept of municipally owned retail broadband networks—a model that has consistently failed to deliver on its promises in the many regions it has been tried—and it outlines several problematic proposals for new universal service funding mechanisms.

A. Reviving Municipal Broadband?

According to the National Broadband Plan, there are 14 million people living in seven million housing units that do not have access to terrestrial broadband infrastructure capable of meeting the National Broadband Availability Target, which the report defines as 4 Mb/s. Among the recommendations the FCC makes are that the government should facilitate tribal, state, regional and local broadband initiatives, and that "Congress should make clear that state, regional and local governments can build broadband networks."

The policy reignites debate about the sustainability of public broadband projects, especially when set up to compete with commercial providers. As noted in Reason Foundation's *Annual Privatization Report 2008*, a total of $840 million was lost on some 52 municipal wireline broadband ventures from the early 1990s through 2004. This did not count numerous and more costly attempts at fiber to the home, such as Provo, Utah's ill-fated iProvo network, that lost more than $8 million by the time the city decided to sell the system.

Given the poor track record, many state legislatures attempted to rein in cities, towns and villages by passing laws prohibiting municipal broadband projects, especially where there was existing service. Public broadband advocates attacked the bills as infringing on the rights of local governments, but state governments, as guarantors of municipal debt (except in areas of home rule), were within their fiduciary rights to limit what they viewed as profligate spending and borrowing by government subdivisions, especially as more and more municipal broadband failures accumulated nationwide. Pennsylvania was the first state to ban municipal broadband in mid-

decade. Seventeen more followed. The most recent legislative effort, in North Carolina, failed in July. The bill was proposed after Salisbury, N.C., borrowed $30 million to build a fiber-to-the-home network in competition with local telecom cable and wireless service providers.

Although accounts remain sketchy, some stimulus funds reportedly have gone to prop up ailing municipal operations, providing short-term relief. Other municipalities are converting networks once aimed for retail services to support city operations, a transition that can yield more value at less cost. In these scenarios, the wireless network supports traffic and surveillance cameras, electronic meter reading, and inter- and intragency communications in the field. Public broadband service becomes a secondary goal, usually in open areas such as parks and town squares, but the idea of ubiquitous free or low-cost service for all residents is quietly abandoned. A number of cities, including Tacoma, Minneapolis and Corpus Christi, have turned potential liabilities into assets by changing course this way.

The FCC, in its national plan, asserts that there is a role for municipal broadband, hinging its case on the dubious claim that broadband is a utility akin to electricity and water in the early 20th century. That analogy has not always held. For one, a growing number of facilities-based providers compete in each market, even smaller ones. The characteristics of broadband service—multiple, competitive sources of information, services and commerce; a highly elastic value proposition depending upon the customer, and a short, volatile investment cycle—run counter to the "utility model." To its credit, the FCC notes there are risks in municipal broadband, but in the end it dangerously downplays the fiscal havoc they can bring on small communities.

B. Questionable Funding

The FCC assumes the broadband plan will be revenue-neutral or revenue-positive, although it provides no cost estimate. However, it proposes to fund the national broadband plan through the auction of 500 MHz of spectrum owned by broadcasters. The first step in this process would be to persuade the broadcasters to vacate this valuable spectrum.

The FCC proposes a number of ideas, including offering broadcasters a share of the revenues from the auction. But the proposal itself raises numerous policy questions. Does the FCC even have the legal authority to ask for the spectrum back? What happens if the FCC and broadcasters can't reach an agreement? Why can't the broadcasters reach their own spectrum deal with the wireless providers, wherein they'd keep all the revenues from the sale, not just a portion? At a certain point, will the FCC turn to coercion to get the spectrum back? In the end, the funding of the entire National Broadband Plan hinges on a sale of assets the government does not own.

Even as the plan touts spectrum auction as its revenue source, it seeks to offer discounts and set-asides for businesses that promise to adopt unique business models. This recalls the previous Administration's decision to set aside a portion of wireless broadband spectrum for bidders who agreed to provide a tier of free wireless services, offer "family-friendly" Web access, or sell open

platform handsets that could work on any service provider system. Because these business models didn't attract the major carriers, the FCC was forced to postpone the auction repeatedly for fear that the winning bid would be far less than the spectrum was worth.

The FCC also is not afraid to suggest new taxes to fund its regulatory expansion. Buried in Chapter 4 is a recommendation that the federal government investigate establishing a national framework taxation of digital goods and services, such as ringtones, games, applications and software, usually available via a PC or phone download. These digital goods are often exempt from sales tax, mostly because of the nexus rule that exempts out-of-state merchants. A digital goods tax will likely open the door to greater Internet taxation.

C. Expansion of Power

To date, FCC's regulatory scope is primarily focused on telecommunications services—that is, services defined as point-to-point voice telephony. The Communications Act sets specific limits on FCC regulation of the Internet, broadband, cable TV and wireless data. These limits were upheld in the recent decision by the U.S. Court of Appeals for the District of Columbia Circuit's decision in *Comcast v. FCC*.

Therefore, from a free market perspective, among the most troubling parts of the FCC's broadband plan are the recommendations it makes for segments outside its regulatory purview. These recommendations are still subject for debate, but those who believe that consumers have been served best by an unregulated U.S. Internet industry, arguably the fastest moving and most innovative worldwide, are likely to find the FCC's recommendations an unnecessary overreach.

Some of these recommendations include:

- FCC regulation of the way websites such as Facebook, LinkedIn and MySpace collect and use personal information, regulations that can easily extend to any website that uses advertising as a revenue model.
- An FCC role in setting Internet media and content policies.
- FCC funding of the expansion of PBS media and content on the Web.
- Greater FCC regulation of set-top cable boxes, pointedly referred to in the plan as "navigation devices," especially in the way consumers are able to use them to access programming via cable TV, video-on-demand, Web-based platforms and even DVDs.

The FCC even expresses concern for the current financial problems of print media and, while stopping short of recommending specific solutions, suggests there is a potential government role in funding, preserving and/or transitioning print media to the Web.

D. Conclusion

The National Broadband Plan raises important issues and sets a good framework for debate. Some goals are worthy, especially when it comes to creating the proper regulatory climate for greater competition and investment in areas unserved or underserved by broadband.

Yet it attempts to use sweeping, top-down government planning and management to address problems that can be attacked and solved with more targeted and localized policies that are market-friendly and far less intrusive. Its cost is uncertain and we have yet to see a clear path toward its funding. In the end, its huge scope may make it unworkable.

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