

THE CONSUMER WIRELESS EXPERIENCE

HEARING

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

JUNE 17, 2009

Printed for the use of the Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PRINTING OFFICE

54-918 PDF

WASHINGTON : 2010

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

JOHN D. ROCKEFELLER IV, West Virginia, *Chairman*

| | |
|---------------------------------|---|
| DANIEL K. INOUE, Hawaii | KAY BAILEY HUTCHISON, Texas, <i>Ranking</i> |
| JOHN F. KERRY, Massachusetts | OLYMPIA J. SNOWE, Maine |
| BYRON L. DORGAN, North Dakota | JOHN ENSIGN, Nevada |
| BARBARA BOXER, California | JIM DEMINT, South Carolina |
| BILL NELSON, Florida | JOHN THUNE, South Dakota |
| MARIA CANTWELL, Washington | ROGER F. WICKER, Mississippi |
| FRANK R. LAUTENBERG, New Jersey | JOHNNY ISAKSON, Georgia |
| MARK PRYOR, Arkansas | DAVID VITTER, Louisiana |
| CLAIRE McCASKILL, Missouri | SAM BROWNBACK, Kansas |
| AMY KLOBUCHAR, Minnesota | MEL MARTINEZ, Florida |
| TOM UDALL, New Mexico | MIKE JOHANNES, Nebraska |
| MARK WARNER, Virginia | |
| MARK BEGICH, Alaska | |

ELLEN L. DONESKI, *Chief of Staff*

JAMES REID, *Deputy Chief of Staff*

BRUCE H. ANDREWS, *General Counsel*

CHRISTINE D. KURTH, *Republican Staff Director and General Counsel*

BRIAN M. HENDRICKS, *Republican Chief Counsel*

CONTENTS

| | |
|---|-----------|
| Hearing held on June 17, 2009 | Page 1 |
| Statement of Senator Rockefeller | 1 |
| Prepared statement of Hon. Kay Bailey Hutchison submitted by Hon. John D. Rockefeller IV | 3 |
| Statement of Senator Begich | 14 |
| Statement of Senator Warner | 16 |
| Statement of Senator Klobuchar | 19 |
| Statement of Senator Kerry | 22 |
| Statement of Senator Wicker | 66 |

WITNESSES

| | |
|--|----|
| Mark Goldstein, Director, Physical Infrastructure Issues, U.S. Government Accountability Office | 3 |
| Prepared statement | 5 |
| Paul Roth, President—Retail Sales and Service, AT&T Inc. | 25 |
| Prepared statement | 26 |
| John E. Rooney, President and CEO, United States Cellular Corporation | 29 |
| Prepared statement | 31 |
| Robert M. Frieden, Pioneers Chair and Professor of Telecommunications and Law, Penn State University | 36 |
| Prepared statement | 38 |
| Barbara S. Esbin, Senior Fellow and Director of the Center for Communica- tions and Competition Policy, The Progress & Freedom Foundation | 43 |
| Prepared statement | 45 |
| Victor H. “Hu” Meena, President and CEO, Cellular South, Inc. | 53 |
| Prepared statement | 55 |

APPENDIX

| | |
|---|----|
| Response to written question submitted by Hon. Mark Warner to Mark Gold- stein | 77 |
| Response to written questions submitted by Hon. Tom Udall to Paul Roth | 78 |
| Response to written question submitted to John E. Rooney by: | |
| Hon. Mark Warner | 79 |
| Hon. Tom Udall | 80 |
| Response to written questions submitted by Hon. Tom Udall to: | |
| Robert M. Frieden | 82 |
| Barbara S. Esbin | 84 |
| Victor H. “Hu” Meena | 86 |

THE CONSUMER WIRELESS EXPERIENCE

WEDNESDAY, JUNE 17, 2009

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 2:32 p.m. in room SR-253, Russell Senate Office Building. Hon. John D. Rockefeller IV, Chairman of the Committee, presiding.

OPENING STATEMENT OF HON. JOHN D. ROCKEFELLER IV, U.S. SENATOR FROM WEST VIRGINIA

The CHAIRMAN. I'd just like to start off with a kind of mood setter. I've never used—I've been in the Senate for 24 years and I've never used a chart on the floor of the U.S. Senate, so my record is intact. However, this is special.

This is wireless broadband, and the—if you can see, and if you can't, I will make it clear—this is, as you know, not the whole of the United States. It's the Eastern part of the United States. This is called Appalachia; this is called Northeast. This is called Maine; it is white. White means: nothing there. This is called West Virginia; that means: nothing there. And then a little bit in Ohio, that's here. This was the—that would be Kentucky.

But it makes—it makes a very powerful point to me, and it makes a point that resonates emotionally, very, very deeply with me. And that is, we may have hills, Vermont may have some hills and great beauty, as we do. But they also have people, and they have—they count just as much as anybody living at the most fancy address in New York City. So, that picture—white Maine, white West Virginia, me here, Olympia over there, that's just something to think about. It's just a mood setter, that's all it was, it was a mood setter, nothing more than that.

So, throughout the last decade, consumers have grown to rely on the mobility, convenience, and safety that wireless service can and does provide. Ten years ago, less than 100 million consumers had wireless phones. Today, the wireless industry counts more than 270 million Americans who have that, evidently not all of them, however, in at least two states.

However, in light of this success, we have a serious responsibility to ask what the consequences are for an industry that has grown up so fast and in such a short period of time. Usually things don't emerge that quickly without having problems. And so, we're going to discuss some of them.

Have our regulatory models kept up? Yesterday, I had the Chairman of the FCC, for a nomination hearing, and I said if he didn't

fix his shop, we were going to do it for him. It was a stupid thing for me to say, because the guy is so good he'll have it fixed in 3 months; he's brilliant. But, this I'm saying to an industry. Our regulatory models or methods are, I think, wholly insufficient if they exist at all.

If consumers choose to make their wireless phone their only phone, then do they get the service quality they need for such an essential service? Is the phone as good? Does it work as well? Is it as clear? That's important to them. I, for one, have concerns about all of this and more. I have concerns that too many consumers are bound to confusing contracts, I mean brilliantly constructed, but not funny and not amusing to people who don't necessarily spend all their time reading the fine print on prescription drugs or on what you may put out with your product.

So, I have concerns that too many consumers are confounded by the charges on their wireless bills and the way that those charges are delineated, explained, or not explained. I have concerns that the Federal Communications Commission gets so many consumer complaints about wireless service, but then does so little about those complaints. And I'm extremely concerned, as I've indicated, I think six or seven times, for my great State of West Virginia, that we have second-class wireless service in too many rural communities throughout America; I broadened it to include the entire country. So, all of this is very unacceptable to me. And I look forward to making it better, with you.

Let me illustrate. The map I've shown you and the gap in coverage is extraordinarily difficult—I know you have a witness that you can't stay for, but you want to be able to say something about them, and—but you can't—

Senator WICKER. Thank you, no, Mr. Chairman, you go right ahead. I—

The CHAIRMAN. No, I'm not going to interrupt myself.

Senator WICKER. OK.

The CHAIRMAN. But when the moment comes, you're welcome to do that.

Senator WICKER. OK, very good. Well, you proceed in your own fashion, and I'll be fine.

The CHAIRMAN. In my own fashion.

So, when people tell me their wireless service is ubiquitous, I have my doubts, and that's what this hearing is about. I will—I didn't even see what Alaska looked like.

Senator BEGICH. I have a map I'll share with you later.

The CHAIRMAN. I worry that rural States like West Virginia will be left behind, and I simply will not stand for that. We can remedy that on this committee. They can remedy that at the FCC or you can remedy it, but one of the three is going to happen. We're a fair country, we don't treat people unequally, and particularly in something which is growing so fast.

I mean, if you were—if you were a diminishing industry, and you had all kinds of problems, then, you know, I still wouldn't have that much sympathy, but you aren't. You are growing faster than any industry on the face of the Earth.

With that said, I'm grateful to all of our witnesses for being here today. John Kerry is going to take the second part of this hearing,

as he's very deeply and expertly into this area. I thank you for your willingness to participate in what I hope will be a frank and fair conversation about the consumer benefits of wireless service, the viability of our existing regulatory models, and the pros and cons of handset exclusivity, which will be part of the second panel. I look forward to your testimony.

I do not have a Ranking Member, and I'm sorry about that because she's very good.

[The prepared statement of Senator Hutchison follows:]

PREPARED STATEMENT OF HON. KAY BAILEY HUTCHISON, U.S. SENATOR FROM TEXAS

It is critically important that this Committee listen and be responsive to the concerns expressed by consumers. Likewise, it is imperative that we avoid regulating where the marketplace is actively responding to consumers' concerns. In the context of the wireless industry, over the last 10 years the Nation has witnessed unparalleled innovation and growth. Americans have access to more device options than anywhere else in the world, and the sophistication of the applications available to consumers continues to advance rapidly due to significant investment by manufacturers and the wireless providers.

With regard to exclusive handset arrangements, I understand the concerns expressed by some of my colleagues; however, it is important to note that these arrangements are largely responsible for many of the exciting products in the marketplace today. The marketplace is competitive, and the introduction of a breakthrough new technology by one company, spurred by a competitive desire to offer consumers something new and exciting, in turn drives other providers to invest heavily in research and development of similar devices. That creative force provides direct benefits to consumers through rapid advances in technology. I hope we will be mindful of this and tread lightly when it comes to considering new regulations or restrictions on this industry.

I am concerned that unnecessary regulatory intervention here could risk stifling the remarkable levels of private investment and job creation that the wireless industry—both service providers and equipment manufacturers—bring to our economy. Despite the financial challenges that permeate our economy, this industry continues to flourish and, as our economy rebounds, we must work to ensure that investment and job growth continues.

This Committee has previously examined many of the issues to be discussed here today, and I ask my colleagues to take note of the progress that has been made, in the absence of regulatory intervention, in addressing these concerns expressed by consumers. Providers are already responding to many of these issues, and I note that many providers are using their responsiveness in this respect to promote their competitive advantages.

No other segment of the communications industry over the last 15 years has shown the continual growth and innovation of the wireless industry. To date, we have refrained from micro-managing the business practices of this industry, and as we stand on the verge of the next generation of innovative wireless broadband products, the government should proceed with great caution so as to ensure the best outcome for consumers.

So, Mr. Goldstein, the floor is yours.

**STATEMENT OF MARK GOLDSTEIN, DIRECTOR,
PHYSICAL INFRASTRUCTURE ISSUES,
U.S. GOVERNMENT ACCOUNTABILITY OFFICE**

Mr. GOLDSTEIN. Thank you, Mr. Chairman, and members of the Committee. I'm pleased to be here today to discuss wireless consumer issues. The results I will share with you come from GAO's ongoing work to examine the quality of wireless phone service and related FCC and State oversight efforts. Some of the findings I will discuss are based on our recent nationwide survey of wireless phone service users.

The use of wireless phone service in the United States has risen dramatically during the past 20 years. Industry data show the

number of wireless phone service subscribers has grown from 3.5 million subscribers in 1989, to about 270 million subscribers today. Americans increasingly rely on wireless phones as their primary or sole means of communication. Over one-third of households now use only or mostly wireless phones instead of landlines. Concerns have been raised in recent years about the quality of this service.

My statement today will focus on consumers' satisfaction and problems with their wireless phone service, and FCC's efforts to assist wireless consumers with complaints. First, according to the preliminary results of our national survey, most consumers are satisfied with their wireless phone service, but some have experienced problems. Specifically, we estimate that about 84 percent of wireless users are very or somewhat satisfied with their service. However, we also estimate that 10 percent, roughly 20 million people, are very or somewhat dissatisfied.

Looking beyond the overall numbers, we asked users about their satisfaction with five key aspects of wireless service, which were: billing, the terms of service contracts, the carrier's explanation of their service at the point of sale, call quality, and customer service.

Similar to our overall results, we estimate that user satisfaction with each of these aspects ranged from about 70 to 85 percent. However, we also found that the percentage of those users were very or somewhat dissatisfied with these specific aspects, ranged from about 9 to 14 percent.

When examining specific problem areas, our survey results indicate that some users have recently experienced problems with billing, contract terms, and customer service. For example, we estimate that about one-third of those users who are responsible for paying for their service experience problems, at least some of the time, understanding their bills or had unexpected charges. Additionally, among those users who wanted to switch carriers within the last year, about 42 percent did not do so because of the early termination fee they would have to pay. Finally, among those users who contacted their carrier's customer service about a problem, 21 percent were dissatisfied with how their carrier tried to address their concern.

In response to these types of consumer problems noted above, wireless carriers have taken a number of actions. For example, the major carriers now prorate their early termination fees, so that such costs decrease over time. Carriers also offer service options that do not require contracts, and the industry spends billions of dollars each year on infrastructure to improve call quality and coverage.

Second, FCC assists wireless consumers by handling thousands of their complaints about carrier service every year, but consumers may lack awareness of this process and its intended outcomes. Consumers can complain to the FCC through various means, including contacting FCC by phone or using the agency's website to submit complaints. FCC reviews these complaints, forwards them to a carrier for a response, and reviews whether the carrier responded to the concerns the consumers raised.

When considering that, as our survey suggests, some consumers are dissatisfied even after contacting their carrier for help, the FCC's efforts to handle complaints are an important means by

which consumers may be able to seek relief. However, our survey results suggest that most consumers do not know they can complain to the FCC. Specifically, when asked where they would complain if they had a problem their carrier couldn't resolve, only about 13 percent of wireless users said they would complain to the FCC. Further, we estimated that about 34 percent do not know where they would complain, that is roughly translatable to about 66 million people.

Third, the FCC lacks goals that clearly identify the intended outcomes of its consumer complaint efforts. For example, it is not clear if the intended outcome of the FCC's complaint process is resolving consumer problems or fostering communication between consumers and carriers. The agency also lacks measures to demonstrate how well it is achieving its intended outcomes.

For example, the FCC has a goal to improve the customer experience with its call centers and websites, but it lacks measures of customer service. Consequently, consumers may not understand what to expect from the FCC's complaint process, and the effectiveness of the FCC's efforts appears unclear. They do not, for instance, measure the effectiveness of their own complaint process and how consumers are responding.

We intend to complete our work on this engagement for the Committee this fall, which will include examination of the FCC's oversight of wireless phone service, and the extent to which State Utility Commissions provide oversight and assist customers. We expect to have recommendations for the FCC when we complete our work.

Mr. Chairman, this concludes my remarks and I'd be happy to answer questions you or members of the Committee have.

[The prepared statement of Mr. Goldstein follows:]

PREPARED STATEMENT OF MARK GOLDSTEIN, DIRECTOR,
PHYSICAL INFRASTRUCTURE ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Chairman Rockefeller and Members of the Committee:

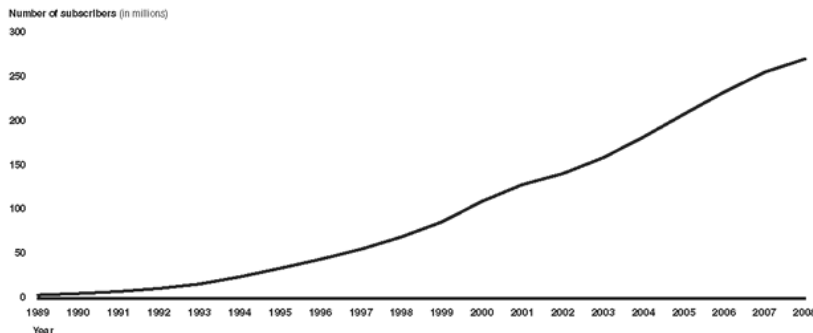
We appreciate the opportunity to participate in this hearing to discuss wireless phone service consumer issues. My statement today is based on our ongoing work on consumers' experience with wireless phone service and efforts by the Federal Communications Commission (FCC) to assist wireless phone service consumers with complaints.¹ The use of wireless phone service in the United States has risen dramatically over the last 20 years, and Americans increasingly rely on wireless phones as their primary or sole means of telephone communication. According to industry data, wireless subscribership has grown from about 3.5 million subscribers in the United States in 1989 to about 270 million today (see fig. 1).² About 82 percent of

¹For the purposes of this report, the term *wireless phone service* includes the provision of wireless phone service by cellular, broadband personal communications service, and digital specialized mobile radio carriers. Federal law and FCC regulations refer to wireless phone service as "commercial mobile service" or "commercial mobile radio service." This service may generally be referred to as wireless phone service, mobile phone service, or cellular (or cell) phone service interchangeably.

²CTIA—The Wireless Association (CTIA), a nonprofit membership organization representing all sectors of wireless communications, estimated there were 270.3 million wireless phone service subscribers in the United States as of December 2008. CTIA, since 1985, has surveyed its members semi-annually about their subscriber numbers. Industry data count a subscriber as any person using a wireless phone under a paid subscription. Because an individual could have more than one wireless phone, and thus more than one subscription, the number of wireless phone service users would be smaller than the number of subscribers.

adults now live in households with wireless phone service, and 35 percent of households use wireless phones as their primary or only means of telephone service.³

Figure 1: Estimated Growth in Wireless Phone Subscribers from 1989 through 2008



Source: CTIA—The Wireless Association, used by permission.

Note: Industry data count a subscriber as any person using a wireless phone under a paid subscription. Because an individual could have more than one wireless phone, and thus more than one subscription, the number of wireless phone service users would be smaller than the number of subscribers.

Concerns have been raised in recent years about the quality of wireless phone service, including specific concerns about billing, customer service, and carriers' contract terms, such as fees carriers charge customers for terminating their service before the end of the contract period (known as early termination fees). Under Federal law, FCC is directed to foster a competitive wireless marketplace and the agency has the flexibility to exempt wireless carriers from regulation if it determines that doing so promotes competition and is in the public interest.⁴ FCC's rules require that wireless carriers, like other common carriers, provide their services to consumers at a reasonable rate and in a manner that is not discriminatory.⁵ Its rules also establish procedures for FCC to work with carriers to address consumer complaints.⁶ States, which have traditionally regulated local telephone service, also retain some authority under Federal law to regulate the terms and conditions of wireless phone service, and many address consumer complaints.⁷

My testimony today discusses: (1) consumers' satisfaction with wireless phone service and problems they have experienced with this service and (2) FCC's efforts to address consumers' complaints about this service. This testimony presents preliminary observations based on ongoing work we expect to complete this Fall for this committee and the House Subcommittee on Communications, Technology, and the Internet. This ongoing work will also examine FCC's wireless phone service oversight efforts and the extent to which state utility commissions oversee wireless phone service and assist consumers.

To determine consumers' satisfaction with their wireless phone service and identify problems consumers have experienced with this service, we surveyed a nationally representative, randomly selected sample of adult wireless phone users aged 18 or older who had cell phone service in 2008, from which we completed 1,143 inter-

³The Centers for Disease Control's National Center for Health Statistics estimated that as of December 2008, about 20 percent of American households had only wireless phones and another 15 percent that also had landlines received all or most calls on wireless phones.

⁴47 U.S.C. § 332(c). FCC was given the authority to refrain from applying certain provisions of the Communications Act of 1934 to wireless carriers that it found to be unnecessary under specific statutory criteria. For example, FCC did not apply provisions that restricted market entry or exit.

⁵47 C.F.R. § 20.15(a). Section 201(b) of the Communications Act of 1934 requires just and reasonable rates and 202(a) prohibits rates that are unreasonably discriminatory. 47 U.S.C. §§ 201, 202. A common carrier, such as a telephone company, provides communications services for hire to the public.

⁶47 C.F.R. §§ 1.711–1.736.

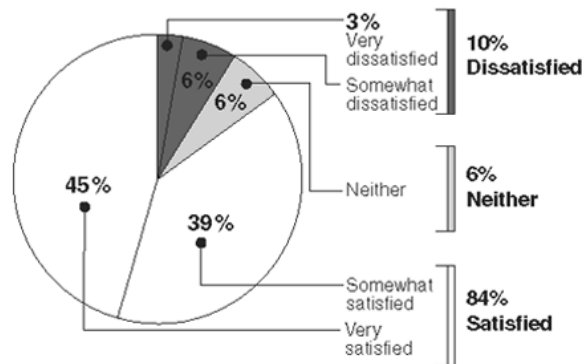
⁷See 47 U.S.C. § 332(c)(3)(A). The House Committee Report on the Omnibus Budget Reconciliation Act of 1993, in reference to section 332(c)(3)(A), explained that "other terms and conditions" of wireless service, which are regulated by the states, "include such matters as customer billing information and practices and billing disputes and other consumer protection matters." H.R. Rep. No. 103–111 (1993). Under § 332(c)(3)(A) states are preempted from regulating rates and market entry but are not precluded from regulating the other terms and conditions of service.

views;⁸ interviewed stakeholders from various organizations, including national consumer and state agency organizations, state agencies in three selected states (California, Nebraska, and West Virginia),⁹ wireless industry associations, the four major wireless carriers and two selected smaller carriers, and FCC; and reviewed documents obtained from these sources. To determine how FCC addresses consumers' complaints, we interviewed FCC officials about these activities and reviewed related documentation obtained from the agency. We also reviewed relevant laws, regulations, and procedures and FCC's quarterly complaint reports, strategic plan, and budget, including the agency's performance goals and measures (additional information about our scope and methodology appears in app. I). We are conducting this performance audit, which began in September 2008, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings based on our audit objectives.

According to Our National Survey, Most Consumers Are Satisfied with Their Wireless Phone Service, but Some Have Experienced Problems

According to our survey results, overall, wireless phone service consumers are satisfied with the service they receive. Specifically, we estimate that 84 percent of adult wireless phone users are very or somewhat satisfied with their wireless phone service, and that approximately 10 percent are very or somewhat dissatisfied with their service (see fig. 2).¹⁰

Figure 2: Estimated Overall Satisfaction of Wireless Phone Users with Their Service



Source: GAO survey.

Note: GAO conducted its survey of adult wireless phone users from February 23, 2009, through April 5, 2009. All estimates presented in this figure have a margin of error of less than plus or minus 5 percentage points. The percentage of users very or somewhat dissatisfied with wireless phone service is 10 percent but does not add up to such in the figure due to rounding. "Neither" refers to respondents who indicated they were neither satisfied nor dissatisfied. Additionally, we estimate that less than 1 percent of users had no opinion or did not know about their overall satisfaction. Numbers may not sum to 100 because of rounding.

Stakeholders we interviewed identified a number of areas in which consumers have reported problems with their wireless phone service in recent years.¹¹ On the

⁸The response rate was calculated as 32 percent using a survey research industry accepted method; however, since response rates can be calculated in other ways, the response rate could be different. We use the terms "user" and "consumer" in our report. "User" refers specifically to the population sampled for our survey, while "consumer" is used more generally.

⁹We selected these states based on their various geography, populations, and regions, and their varying approaches to providing wireless phone service oversight based on information obtained from national organizations representing state agency officials.

¹⁰Estimates we present based on our survey results have a margin of error of less than 5 percent unless otherwise noted.

¹¹The stakeholders we interviewed represent consumer organizations, state agencies in selected states, national organizations that represent state officials, wireless carriers, industry associations, and FCC.

basis of these interviews and related documents, we identified five key areas of concern (see table 1).¹²

Table 1.—Key Areas of Consumer Concern Identified by Stakeholders

| Key area of concern | Nature of concern |
|---------------------------|--|
| Billing | <ul style="list-style-type: none"> Complexity of billing statements leads to lack of consumer understanding. Bills contain unexpected charges and errors. |
| Terms of service contract | <ul style="list-style-type: none"> Consumers are subject to fees for canceling their service before the end of their contract term (early termination fees), regardless of their reason for wanting to terminate service, effectively locking consumers into their contracts. Consumers are not given enough time to try out their service before having to commit to the contract. Carriers extend contracts when consumers request service changes. |
| Explanation of service | <ul style="list-style-type: none"> Key aspects of service, such as rates and coverage, are not clearly explained to consumers at the point of sale (when they sign up for the service). |
| Call quality | <ul style="list-style-type: none"> Consumers experience dropped or blocked calls as well as noise on calls that makes hearing calls difficult. Consumers experience poor coverage, which in rural areas may be the result of lack of infrastructure and in urban areas stems from lack of capacity to manage the volume of calls at peak times. |
| Customer service | <ul style="list-style-type: none"> Consumers experience problems such as long waits, ineffective assistance, and insufficient resolution to problems. |

Source: GAO analysis.

Based on our survey results, we estimate that most wireless phone users are satisfied with these five specific aspects of service; however, the percentages of those very or somewhat dissatisfied range from about 9 to 14 percent, depending on the specific aspect of service (see table 2). For example, we estimate that 14 percent of wireless phone users are dissatisfied with the terms of their service contract. We also estimate that 85 percent of wireless phone users are very or somewhat satisfied with call quality, while the percentages of those very or somewhat satisfied with billing, contract terms, carrier's explanation of key aspects of service at the point of sale, and customer service range from about 70 to 76 percent. Additionally, we estimate that most wireless phone users are satisfied with specific dimensions of call quality. For example, we estimate that 86 to 89 percent of wireless phone users are satisfied with their coverage when using their wireless phones at home, at work, or in their vehicle.

Table 2.—Estimated Levels of Satisfaction with Specific Aspects of Wireless Phone Service, by Percentage

| Aspect of service | Level of satisfaction | | | |
|---------------------------|------------------------------|---------------------------------|-----------------------------------|------------------------------|
| | Satisfied (very or somewhat) | Dissatisfied (very or somewhat) | Neither satisfied or dissatisfied | No opinion/no basis to judge |
| Billing | 76 | 12 | 4 | 8 |
| Terms of service contract | 72 | 14 | 6 | 8 |
| Explanation of service | 76 | 9 | 5 | 10 |
| Call quality | 85 | 11 | 4 | <1 |
| Customer service | 70 | 12 | 6 | 12 |

Source: GAO survey.

Note: GAO conducted its survey of adult wireless phone users from February 23, 2009, through April 5, 2009. All estimates presented in this table have a margin of error of less than plus or minus 5 percentage points. All respondents were asked about their level of satisfaction with each of these five aspects of wireless phone service. Respondents were also asked not to indicate a level of satisfaction if they had no basis to judge a particular aspect of service. For example, a respondent may have no basis to judge satisfaction with the contract terms if he or she did not sign the contract under which they have service. Percentages may not sum to 100 due to rounding.

Other results of the survey suggest that some wireless phone consumers have recently experienced problems with billing, certain contract terms, and customer serv-

¹² Unsolicited telemarketing on wireless phones was also cited as a key area of consumer concern by the stakeholders we interviewed. Congress passed the Telecommunications Consumer Protection Act (TCPA), as well as the Controlling the Assault of Non-Solicited Pornography and Marketing Act (CANSPAM), to protect consumers against unsolicited telemarketing. Because such problems generally deal with telemarketers, not the services provided by wireless carriers, we did not examine this issue within the scope of our review. However, from our survey, we estimate that unsolicited calls or text messages to users' wireless phones are not a problem at all for 48 percent of wireless phone users, a little problem for 24 percent, somewhat of a problem for 10 percent, and a moderate or major problem for 17 percent.

ice since the beginning of 2008. For example, we estimate that during this time about 34 percent of wireless phone users responsible for paying for their service received unexpected charges, and about 31 percent had difficulty understanding their bill at least some of the time.¹³ Also during this time, almost one-third of wireless users who contacted customer service about a problem did so because of problems related to billing.¹⁴ Further, among wireless users who wanted to switch carriers during this time but did not do so, we estimate that 42 percent did not switch because they did not want to pay an early termination fee.¹⁵ Finally, among those users who contacted customer service, we estimate that 21 percent were very or somewhat dissatisfied with how the carrier handled the problem.

In response to the areas of consumer concern noted above, wireless carriers have taken a number of actions in recent years. For example, officials from the four major carriers, Verizon Wireless, AT&T, Sprint Nextel, and T-Mobile, reported taking actions such as prorating their early termination fees, offering service options without contracts, and providing web-based tools consumers can use to research a carrier's coverage area, among other efforts.¹⁶ In addition, according to CTIA—The Wireless Association, the wireless industry spent an average of \$24 billion annually between 2001 and 2007 on infrastructure and equipment to improve call quality and coverage. Also, carriers told us they use information from third-party tests and customer feedback to determine their network and service performance and identify needed improvements.

FCC Assists Consumers with Wireless Complaints but Lacks Clear Goals and Outcome Measures for These Efforts

FCC assists wireless consumers by handling thousands of their informal complaints each year,¹⁷ but consumers may lack awareness of this process and its intended outcomes. FCC has a process to receive consumers' complaints and forward them to carriers for a response. However, the results of our consumer survey suggest that most consumers are not aware of FCC's complaint process. Furthermore, FCC has not articulated goals that clearly identify the intended outcomes of its efforts to address wireless consumer complaints and lacks related measures. As a consequence, FCC's effectiveness in assisting wireless consumers with complaints is unclear and consumers may not understand what to expect from FCC's complaint process.

FCC Assists Consumers with Wireless Complaints

Each year, FCC receives thousands of complaints submitted by consumers about problems with telecommunications services, including wireless service, via its

¹³We estimate that about 83 percent of wireless users are responsible for paying for their wireless phone service. Respondents were asked about the extent of such billing problems since the beginning of 2008.

¹⁴We estimate that about 44 percent of wireless users contacted customer service about a problem since the beginning of 2008.

¹⁵We estimate that about 19 percent of wireless users wanted to switch carriers since the beginning of 2008 but did not do so. The 42 percent of these wireless phone users who wanted to switch but did not because of the early termination fee has a margin of error of 7.4 percent. Additionally, among the wireless users who did not indicate they were satisfied with the terms of their wireless phone service, we estimate that 25 percent were not satisfied because of early termination fees. Wireless users were asked about their satisfaction with the terms of their service in general, not specifically since the beginning of 2008. The margin of error for the estimate of wireless phone users that were not satisfied with the terms of their service because of early termination fees is 6.7 percent.

¹⁶In addition, in 2003, the industry adopted a voluntary code that includes a number of requirements carriers that sign the code agree to abide by. These requirements include disclosing to consumers at the point of sale and on their websites certain service terms and rates, providing a 14-day trial period before customers must commit to contracts, providing access to customer service, and separately identifying certain fees and charges on customers' bills, among other requirements. Carriers submit information annually to CTIA for review to demonstrate compliance with the code.

¹⁷In addition to addressing informal complaints, FCC also assists wireless consumers through other outreach and education efforts, such as answering consumer inquiries and publishing fact sheets about wireless phone service issues and complaints. The information presented here represents a description of FCC's process for handling informal consumer complaints. The agency also has a formal complaint process, and consumers may file formal complaints if they are not satisfied with the results of filing an informal complaint. However, there is a cost for filing a formal complaint, the process for doing so is similar to a court proceeding, and it is governed by specific rules about what information must be submitted. According to FCC, the formal complaint process is typically used by corporations, not consumers, and FCC has held only one proceeding in response to a consumer's formal wireless complaint within the past 5 years.

website, telephone, e-mail, mail, or fax.¹⁸ In 2008, the agency received over 430,000 informal complaints from consumers, including over 19,000 complaints related to services provided by wireless carriers.¹⁹ The top categories of wireless complaints FCC reported receiving were for problems related to billing and rates, service-related issues, and contract early termination fees.²⁰ According to FCC officials, the agency informs consumers they may complain to FCC about problems with their wireless service or other telecommunications services by providing information on how to complain to the agency on its website and in fact sheets that are distributed to consumers through its website and other methods.²¹

After reviewing a complaint received, FCC responds by sending the consumer a letter about the complaint's status. If FCC determines that the complaint should be forwarded to the carrier for a response, the agency sends the complaint to the carrier and asks the carrier to respond to FCC and the consumer within 30 days. Once FCC receives a response from the carrier, the agency reviews the response, and if FCC determines the response has addressed the consumer's complaint, marks the complaint as closed.²² FCC officials told us they consider a carrier's response to be sufficient if it responds to the issue raised in the consumer's complaint; however, such a response may not address the problem to the consumer's satisfaction. When FCC considers a complaint to be closed, it sends another letter to the consumer, which states that the consumer can call FCC with further questions or, if not satisfied with the carrier's response, can file a formal complaint. FCC officials also told us that if a consumer is not satisfied, the consumer can request that FCC mediate with the carrier on his or her behalf; however, the letter FCC sends to a consumer whose complaint has been closed does not indicate this is an option.²³

Since, based on our survey results, we estimate that about 21 percent of wireless phone users who contacted their carriers' customer service were dissatisfied with how their carriers addressed their concerns, FCC's efforts to handle complaints are an important means by which consumers may be able to get assistance in resolving their problems. However, the results of our consumer survey suggest that most consumers would not complain to FCC if they have a problem that their carrier did not resolve. Specifically, we estimate that 13 percent of wireless phone users would complain to FCC if they had such a problem and that 34 percent do not know where they could complain.

FCC Lacks Clear Goals and Measures for Its Complaint Handling Efforts

FCC has not articulated goals that clearly identify intended outcomes for its efforts to address wireless consumer complaints and lacks measures to demonstrate how well it is achieving intended outcomes. The Government Performance and Results Act of 1993 (GPRA) requires an agency to establish outcome-related performance goals for the major functions of the agency.²⁴ GPRA also requires an agency

¹⁸In addition to wireless complaints, FCC reported receiving complaints about wireline services, cable and satellite services, and television and radio broadcasting. To be considered a complaint by FCC, a consumer's contact must identify a particular entity under FCC's jurisdiction, allege harm or injury, and seek relief. Other consumer contacts seeking information about matters under FCC's jurisdiction are inquiries.

¹⁹FCC reports quarterly on the number and types of consumer complaints it receives. Although the agency includes complaint totals in these reports, FCC officials explained that the figures do not represent the total number of complaints received—only the totals of the top categories reported. We are conducting an analysis of FCC's complaint data that we intend to report on at a later date. FCC also reported receiving over 42,000 wireless complaints in 2008 about unsolicited telemarketing.

²⁰Service-related issues could include problems related to call quality, coverage, and roaming.

²¹In addition to addressing complaints, FCC also assists wireless consumers through other outreach and education efforts, such as answering consumer inquiries and publishing fact sheets about wireless phone service issues and complaints.

²²According to FCC officials, if the response is not sufficient, FCC contacts the carrier again. FCC may also close a complaint for other reasons and not serve it to a carrier, such as if a consumer does not submit complete information with the complaint, if the complaint is not related to an issue within FCC's jurisdiction, if the consumer withdraws the complaint, or if FCC rejects the complaint because it is invalid, incomplete, a duplicate, a false submission, or submitted on the wrong form, among other reasons. According to FCC officials, a valid complaint that can be served to a carrier must identify a particular carrier, allege harm, and seek relief.

²³The mediation process described here is informal and conducted by FCC's Consumer and Governmental Affairs Bureau. FCC officials told us that the agency's Enforcement Bureau has a separate formal mediation process that handles resolving complaints by market participants, entities, or organizations against common carriers.

²⁴This Act is the centerpiece of a statutory framework that Congress put in place during the 1990s to help resolve the long-standing management problems that have undermined the Federal Government's efficiency and effectiveness and to provide greater accountability for results. See GAO, *Results-Oriented Government: GPRA Has Established a Solid Foundation for Achieving Greater Results*, GAO-04-38 (Washington, D.C.: Mar. 10, 2004).

to develop performance indicators for measuring the relevant outcomes of each program activity in order for the agency to demonstrate how well it is achieving its goals.²⁵

FCC's key goal related to its consumer complaint efforts is to "work to inform American consumers about their rights and responsibilities in the competitive marketplace." Under this key goal, one of FCC's subgoals is to "facilitate informed choice in the competitive telecommunications marketplace." According to FCC officials, "informed choice" means consumers are informed about how a particular telecommunications market works, what general services are offered, and what to expect when they buy a service. FCC's measure pertaining to its efforts to address wireless consumer complaints under this subgoal is to respond to consumers' general complaints within 30 days.²⁶ According to FCC officials, this measure reflects the time it takes FCC to initially respond to the consumer about the status of a complaint. This measure does not clearly or fully demonstrate FCC's achievement of its goal to facilitate informed consumer choice. Additionally, this is a measure of a program output, or activity, rather than of the outcome the agency is trying to achieve. Another subgoal is to "improve customer experience with FCC's call centers and website." While this subgoal does identify an intended outcome, FCC does not have a measure related to this outcome that pertains to consumers who complain about services provided by their wireless carrier.²⁷ FCC officials told us that they do not measure customer experience with the agency's call centers and websites, but sometimes receive anecdotal information from customers about their experiences.²⁸

We have previously reported that to better articulate results, agencies should create a set of performance goals and measures that address important dimensions of program performance. FCC's goals may not represent all of the important dimensions of FCC's performance in addressing consumer complaints. A logical outcome of handling complaints is resolving problems, or, if a problem cannot be resolved, helping the consumer understand why that is the case.²⁹ However, it is not clear whether resolving problems is an intended outcome of FCC's consumer complaint efforts. While FCC's goals in this area indicate that informing consumers is a goal of the agency, some information from FCC implies that another intended outcome of these efforts is to resolve consumers' problems. For example, FCC's fact sheets state that consumers can file a complaint with FCC if they are unable to resolve a problem directly with their carrier. This may lead consumers to believe that FCC will assist them in obtaining a resolution. However, FCC officials told us that the agency's role in addressing complaints, as outlined in the law, is to facilitate communication between the consumer and the carrier and that FCC lacks the authority to compel a carrier to take action to satisfy many consumer concerns. Thus, it is not clear if the intended outcome of FCC's complaint handling efforts is resolving consumer problems, fostering communication between consumers and carriers, or both. Furthermore, FCC has not established measures of its effectiveness in either resolving consumer problems or fostering communication between consumers and carriers.³⁰ For example, FCC does not measure consumer satisfaction with its complaint-handling efforts. Without clear outcome-related goals and measures linked to those goals, the purpose and effectiveness of these efforts are unclear and the agency's accountability for its performance is limited.³¹ Moreover, consumers may not understand what to expect from FCC's complaint process.

²⁵ 31 U.S.C. § 1115.

²⁶ This goal has a separate measure for responding to TCPA-related complaints (junk fax and do-not-call list complaints) within 20 days.

²⁷ For this subgoal, FCC does have a measure to inform consumers with TCPA-related complaints about the status of their complaints within 20 days and to refer all such eligible complaints to the Enforcement Bureau.

²⁸ FCC officials told us they do take steps to review the quality of their complaint handling efforts internally, such as having supervisors review complaints and monitor staff performance.

²⁹ An agency's complaint-handling effort may lead to various resolution outcomes for the consumer. For example, we reported that the Office of the Comptroller of the Currency's process for resolving consumers' complaints about banks could lead to the agency providing the consumer with additional information, a complaint being withdrawn or tabled because of litigation, or the agency determining that the bank did, or did not, make an error. See GAO, *OCC Consumer Assistance: Process Is Similar to That of Other Regulators but Could Be Improved by Enhanced Outreach*, GAO-06-93 (Washington, D.C.: Feb. 23, 2006).

³⁰ FCC does track its closures of consumer complaints and the amount of money that is refunded to consumers as a result of its complaint handling efforts.

³¹ We have identified inadequate performance management practices as a recurring problem in our recent reviews of FCC programs. Specifically, we reported in March 2009 that FCC's E-rate program for universal service lacked performance goals and adequate performance measures; in June 2008 that the high-cost universal service program also lacked performance goals

Chairman Rockefeller and members of the Committee, this concludes my prepared statement. Our future work, which we expect to complete this Fall, will provide more definitive information about many of the matters covered in my statement today, including detailed information about oversight of wireless phone service carried out by FCC and state utility commissions. We also expect to make recommendations at that time. I would be pleased to respond to any questions that you or other members of the Committee might have.

APPENDIX I: SCOPE AND METHODOLOGY

To obtain information about consumers' satisfaction and problems with their wireless phone service, we commissioned a telephone survey of the U.S. adult population of wireless phone service users. Our aim was to produce nationally representative estimates of adult wireless phone service users': (1) satisfaction with wireless service overall and with specific aspects of service, including billing, terms of service, carriers' explanation of key aspects of service, call quality and coverage, and customer service; (2) frequency of problems with call quality and billing; (3) desire to switch carriers and barriers to switching; and (4) knowledge of where to complain about problems. Percentage estimates have a margin of error of less than 5 percentage points unless otherwise noted. We conducted this survey of the American public from February 23, 2009, through April 5, 2009. A total of 1,143 completed interviews were collected, and calls were made to all 50 states. Our sampling approach included randomly contacting potential respondents using both landline and cell phone telephone numbers. Using these two sampling frames provided us with a more comprehensive coverage of adult cell phone users.

Because we followed a probability procedure based on random selections, our sample is only one of a large number of samples that we might have drawn. Since each sample could have provided different estimates, we express our confidence in the precision of our particular sample's results as a 95 percent confidence interval. This is the interval that would contain the actual population value for 95 percent of the samples we could have drawn. As a result, we are 95 percent confident that each of the confidence intervals in this report will include the true values in the study population. Each sampled adult was subsequently weighted in the analysis to account statistically for all the adult cell phone users of the population. The final weight applied to each responding adult cell phone user included an adjustment for the overlap in the two sampling frames, a raking adjustment to align the weighted sample to the known population distributions from the 2009 supplement of the U.S. Census Bureau's Current Population Survey and the Centers for Disease Control's 2008 National Health Interview Survey, and an expansion weight to ensure the total number of weighted adults represent an estimated adult population eligible for this study.¹

Telephone surveys require assumptions about the disposition of noncontacted sample households that meet certain standards. These assumptions affect the response rate calculation. For this survey the response rate was calculated using the American Association of Public Opinion Research (AAPOR) Response Rate 3. Based on these assumptions, the response rate for the survey was 32 percent; however, the response rate could be lower if different assumptions had been made and might also be different if calculated using a different method. We used random digit dial (RDD) sampling frames that include both listed and unlisted landline numbers from working blocks of numbers in the United States. The RDD sampling frame approach cannot provide any coverage of the increasing number of cell-phone-only households and

and measures; in February 2008 that FCC's enforcement efforts lacked measurable goals and related performance measures, as well as management tools to fully measure outcomes; and in April 2006 that FCC's efforts to address junk fax complaints lacked long-term and annual goals for monitoring and enforcement, as well as analysis needed to demonstrate the effectiveness of current enforcement measures. See GAO, *Telecommunications: Long-Term Strategic Vision Would Help Ensure Targeting of E-rate Funds to Highest-Priority Uses*, GAO-09-253 (Washington, D.C.: Mar. 27, 2009); *Telecommunications: FCC Needs to Improve Performance Management and Strengthen Oversight of the High-Cost Program*, GAO-08-633 (Washington, D.C.: June 13, 2008); *Telecommunications: FCC Has Made Some Progress in the Management of its Enforcement Program but Faces Limitations, and Additional Actions Are Needed*, GAO-08-125 (Washington, D.C.: Feb. 15, 2008); and *Telecommunications: Weaknesses in Procedures and Performance Management Hinder Junk Fax Enforcement*, GAO-06-425 (Washington, D.C.: Apr. 5, 2006).

¹U.S. Census Bureau, *Current Population Survey: March 2008 Annual Social and Economic Supplement* (Washington, D.C.: Feb. 5, 2009); S.J. Blumberg and J.V. Luke, Wireless substitution: Early release of estimates from the *National Health Interview Survey, January-June 2008*, Centers for Disease Control, National Center for Health Statistics (Available from: <http://www.cdc.gov/nchs/nhis.htm>: Dec. 17, 2008).

limited coverage of cell-phone-mostly households (*i.e.*, households that receive most of their calls on cell phones in spite of having a landline). Because of the importance of reaching such households for this survey about wireless phone service, we also used an RDD cell phone sampling frame. The RDD cell phone sampling frame was randomly generated from blocks of phone numbers that are dedicated to cellular service. About 43 percent of the completed interviews were from the RDD cell phone sample.

Because many households contain more than one potential respondent, obtaining an unbiased sample from an RDD frame of landline numbers requires interviewing a randomly selected respondent from among all potential respondents within the sampled household (as opposed to always interviewing the individual who initially answers the phone). We obtained an unbiased sample by using the most recent birthday method, in which the interviewer asks to speak to the household member aged 18 or older with a wireless phone who had the most recent birthday. If the respondent who was identified as the member of the household with the most recent birthday was unavailable to talk and asked to schedule a callback, the call representative recorded the person's name and preferred telephone number for the callback. There were also cases when a respondent from the cell phone sample asked to be called back on his or her landline. These respondents, if they completed the survey, were considered a completed interview from the cell phone sample. There were no respondent selection criteria for the cell phone sample; each number dialed from the cell phone sample was assumed to be a cell phone number, and each cell phone was assumed to have only one possible respondent to contact.

The results of this survey reflect wireless phone users' experience with their current or most recent wireless phone service from the beginning of 2008 through the time they were surveyed. Not all questions were asked of all respondents. For example, questions about the prevalence of billing problems were asked only of respondents who indicated they were solely or jointly responsible for paying for their service. Additionally, satisfaction with wireless coverage for particular locations (*i.e.*, at home, at work, and in a vehicle) was calculated only among respondents who indicated they used their wireless phone service in those locations.

To identify the type and nature of problems consumers have experienced in recent years with their wireless phone service, we interviewed officials from the Federal Communications Commission (FCC), consumer organizations,² national organizations that represent state agency officials,³ and state agency officials from three selected states—California, Nebraska, and West Virginia—representing utility commissions, offices of consumer advocates, and offices of attorneys general. We selected these states based on their various geography, populations, and region, and their varying approaches to providing wireless phone service oversight based on information obtained from national organizations representing state agency officials. We also interviewed officials from the four major wireless carriers,⁴ two selected smaller carriers that serve mostly rural areas,⁵ and wireless industry associations.⁶ In addition, we reviewed documents obtained from some of these sources and FCC's recent quarterly reports about consumer complaints. We also used the information obtained from these stakeholders to develop some of the questions in the consumer survey.

To determine how FCC addresses consumer complaints, we interviewed FCC officials about these activities and reviewed related documentation obtained from these officials. We also reviewed relevant laws, regulations, and procedures, as well as FCC's quarterly complaint reports, strategic plan, and budget with performance goals and measures. In addition, we reviewed the Government Performance and Results Act of 1993 requirements and our prior recommendations on performance goals and measures and determined whether FCC's efforts to measure the performance of its consumer assistance efforts are consistent with these requirements and recommendations.

The CHAIRMAN. Thank you, Mr. Goldstein. You are right on time.
Mr. GOLDSTEIN. Thank you, sir.

²We met with the national organizations AARP, Consumers Union, and the Council of Better Business Bureaus. We also met with The Utility Reform Network and Consumer Action in California.

³The National Association of Attorneys General, the National Association of Regulatory Utility Commissioners, and the National Association of State Utility Consumer Advocates.

⁴AT&T, Sprint Nextel, T-Mobile, and Verizon Wireless.

⁵The two rural carriers, nTelos and Viaero, were selected because they operated in two of the states from which we interviewed state officials based on referrals from those officials.

⁶CTIA—The Wireless Association and the Rural Cellular Association.

The CHAIRMAN. We don't know how to adjust to that around here.

[Laughter.]

Mr. GOLDSTEIN. I have done this before.

The CHAIRMAN. I want to beg my two colleagues, Senator Begich and Senator Warner, that Senator Wicker has to go to an important meeting, but he has somebody who is in the second panel, from his State, that he wishes to introduce, and I wanted to give him the chance to do so.

Senator WICKER. Actually, I'm—I think what I'll do—I appreciate that, Mr. Chairman—is I'll attend a very brief meeting and come back, and I think I'll be able to mention my constituent from Mississippi at that point. Thank you, sir.

The CHAIRMAN. Well, at least everybody knows how gracious I am.

[Laughter.]

Senator WICKER. We've known that for quite a number of years, Mr. Chairman.

The CHAIRMAN. Senator Begich?

**STATEMENT OF HON. MARK BEGICH,
U.S. SENATOR FROM ALASKA**

Senator BEGICH. Thank you, Mr. Chairman, and I will be leaving in just a few minutes because I have to preside on the floor.

But let me, if I can, I have a couple of questions about this, and thank you for doing this work on behalf of the Committee. You had indicated in October, you'll be completed and final with recommendations.

Mr. GOLDSTEIN. We expect by November, sir.

Senator BEGICH. By November, I'm sorry, but with recommendations?

Mr. GOLDSTEIN. That's correct.

Senator BEGICH. Will that be—you had mentioned recommendations, I think to FCC, but also will you have any legislative recommendations, or is it really just focused on regulatory changes within the FCC?

Mr. GOLDSTEIN. It's too early to really tell the nature of the changes. We will clearly have recommendations, I suspect, for FCC, but depending on the nature of our findings and results, we might have legislative recommendations, as well. We sometimes do.

Senator BEGICH. And, can you tell me, just remind me from the report, the universe of survey that you used and what size of group and how did you do that, just very quickly.

Mr. GOLDSTEIN. The survey was based on a national sample of 1,143 randomly chosen Americans, all adults who use cell phones.

Senator BEGICH. OK. Did you—in your process, did you identify within the survey sample, I'm trying to figure out how to say this, you know, when you do a survey sample—a political one—you're trying to get the demographics. In this case, the demographics are users—or types of companies that they use. Did you have any of that demographic data that you could use in this 1,100-plus sample? In other words, could you tell, you know, it's predominantly one company—or was it smaller companies, or anything of that nature?

Mr. GOLDSTEIN. We did not include in our survey any questions about specific companies that the consumers used. It was more to get at the quality experience they've had in dealing with calls and locations and billing and things like that. But we did not specifically discuss companies.

Senator BEGICH. Would you, through your process so far, do you think there—and I guess this is what I'm trying to get to—the second panel will have more of this discussion I think, because you have smaller carriers—or smaller companies and then large nationals. Will your survey show or have some discussion of any variance in how people feel about, you know, a national company versus a smaller company, that they get service from?

Is that—do you see where I'm going? I'm trying to—because if you don't have that differential—if 1,100 folks have been surveyed, 1,100-plus, but it's all from predominantly one company or two companies, they might have one view versus a larger spectrum.

Mr. GOLDSTEIN. I understand, sir. Since it was random across the United States, they had an equal opportunity really of getting picked up with any particular carrier. I recognize that some carriers are larger and have more dominant positions, but we did not account for that in the survey itself.

Senator BEGICH. Is that something, as you get the analysis, you kind of put in the back of your mind as you're seeing the final analysis, if anything pops out of that nature? You know, even though you did it by geographic location, but in case something pops out, for example, in the Western States or—you know, I use Alaska, and the map is very interesting, it's very empty—share that with you.

But I'd just be curious if you kind of keep that in the back of your mind as you're completing, if there are any regional differentials, based on customer response to your questions that you asked.

Mr. GOLDSTEIN. Certainly, we will. We will probably be able to determine differences between urban and rural. The sample size population will not allow us to disaggregate to the State level, unfortunately.

Senator BEGICH. No, but I mean like, Western States, South, and so forth.

Mr. GOLDSTEIN. We will—we'll go back and see what we can do about that.

Senator BEGICH. OK, just—and if it can be done.

The other—you made me think of a thought here—in the—and you may not know this—but when the bills are sent out, is there a notification somewhere that's visible—I can't even remember on my bill—that if you have a concern or a complaint, that you can go to the FCC? Is that a requirement? It's not a requirement, is it?

Mr. GOLDSTEIN. I don't believe it is, sir.

Senator BEGICH. OK. Because your point was an interesting point, that so few don't—they don't know where to go, but if we're not telling them where to go, then they won't know where to go.

Mr. GOLDSTEIN. Right, the—

Senator BEGICH. If that's my simplistic way to say it.

Mr. GOLDSTEIN. That's right. As we indicated, roughly 34 percent of the sample, about 60 million people or so, did not know where

to go. They did not know that they could go to anyone other than their carriers. And interestingly enough, we determined that 44 percent of the sample, which is roughly 90 million people, contacted their carrier with a problem last year.

Senator BEGICH. Wow. So, again, in your recommendations, those are the kinds of things you'll look for, to say what do we do to inform the customer better, how do we deal with early termination fees, which seem to be a big complaint by people, even though you've mentioned some things they are doing, some pro rata, and some other things. But, those are the efforts you'll lay out in your recommendations?

Mr. GOLDSTEIN. That's correct, sir.

Senator BEGICH. Very good. Well, thank you very much, and I appreciate the time and—it is very interesting reading the data points that you've laid out in your testimony, and your report also, at this point.

Mr. GOLDSTEIN. Thank you.

Senator BEGICH. Thank you.

The CHAIRMAN. Senator Warner?

**STATEMENT OF HON. MARK WARNER,
U.S. SENATOR FROM VIRGINIA**

Senator WARNER. Thank you, Mr. Chairman.

And thank you, Mr. Goldstein, for your report. I used to know a little something about cell phones and wireless industry.

I have just a couple of follow-up questions following along Senator Begich. Did your sample size allow you to determine—a respondent, whether there were other competitors—other wireless competitors? So, you know, were the incidents of complaints, in terms of quality of service or billing, higher in an area where there may only be a single—single provider, as opposed to a variety of competitive providers?

Mr. GOLDSTEIN. I don't think we determined it, based on how many competitors. We didn't to a level that would allow us to determine how many specific competitors there were.

Senator WARNER. Mr. Chairman, I think that would be, you know—as we look at those areas, I know you've got quite a few unfortunate, kind of, blind spots in your State, and we've got some in my State, in South West Virginia where we don't have coverage. And, as I think we've often shown, where you don't have competition, the ability of a single provider to provide, perhaps, spotty service and spotty coverage is pretty high.

I'd be very interested in knowing, one, if—if there was any way—and I guess you've already completed your survey, but I would have loved to have been in there on the drafting and say—one of the questions being to anybody who takes the survey—did you have any other competitive option in your marketplace, number one.

Mr. GOLDSTEIN. We are doing a companion job, Senator, that we're starting shortly, looking at competition among cell phone providers, which may get into that specific area. But, we tried to focus this particular work solely looking at the experience that customers had.

Senator WARNER. But, my point being—my point being, that I—I would probably wager you a bet, having been in the business for

20 years, around wireless industry, that if you only had a single provider, the incidents of customer complaints would probably be higher than if there was some competitor that you could go to. So, I just—I think that would be a relevant fact.

Mr. GOLDSTEIN. I think that's—

Senator WARNER. Second is, you know, one of the things that—when I used to be in the business, there was a big move toward bundling—bundling your charges in a single billing instrument and, you know, kind of offering an all-you-can-eat package or, a combined level of services that might be—your wireless services and other communications or entertainment services in a single bill. Were you able to determine whether the more bundled packages of—bundled billing packages had higher levels of complaints or was there any kind of analysis done of what type of billing package they got?

Mr. GOLDSTEIN. We didn't, again, didn't get into that level of specificity, just because we had quite a number of questions and wanted to—had to obviously limit the amount of time we could spend with any one consumer. So, there were constraints to the number of questions that we could ask.

Senator WARNER. I know—and I know this is off subject, but I see that—since you're the Director of Physical Infrastructure, as we look at the development of the 700 megahertz bandwidth, you know, which has—as we've seen since—a lot of that has been traditional television broadcast, whether that might help us, in terms of some of the underserved areas, in terms of better coverage patterns.

And I know Senator Rockefeller has got in his, again, his State, and coverage gaps, as we've got in ours, but how we—I'm—I don't know about the Chairman, but one of my goals is to make sure that we get 100 percent wireless coverage in most of our communities. And I just wondered if you had any, kind of, comments or thoughts about—

Mr. GOLDSTEIN. It's obviously a very important issue. I think it's something we will cover in this next part of work on competition, to try and understand just how this map—I think the map that the Chairman put up is very telling, and I think it would be a useful issue to focus on further, and I think we will.

Senator WARNER. Right, because there is, clearly within the existing wireless spectrum, you know, areas that are mountainous, areas with a lot of foliage, have a higher coverage or higher coverage constraints, whereas I think some of this new spectrum that has been allocated actually does a better job of penetration, and we might want to—we might want to address that.

And thank you, Mr. Chairman, for bringing this hearing together.

The CHAIRMAN. Thank you, Senator Warner.

I'm going to take advantage of asking my questions, which I've not asked yet.

I'm fascinated that you took a random survey in the first place. It would—it seems to me that almost, on its face, a random survey of the United States—let me call it the United States of America—without differentiation between peoples, places, densities, all the rest of it, is almost worthless.

When you are trying to figure out what doctors should be reimbursed for Medicare, you study it very closely, you break the country down very closely. There is no such thing as a random survey and there will not be in the future.

But a random survey on something which has grown so fast, which is so important to so many people, it may be that you were just caught, when you did your survey, by the fact that it was going right past you and you couldn't see it or you didn't have a chance to see it. Otherwise, it seems to me, there wasn't very good judgment, because you can't tell anything from a random survey, you can only tell from the specifics, which Senator Warner was referring to.

Mr. GOLDSTEIN. I understand your concern, Mr. Chairman.

Our goal in doing this was—it was our understanding, and I believe this is accurate, that there has never even been a random survey of Americans about the quality of their cell phone service and experience, that the information collected by FCC is insufficient to do that, and that industry data is pretty much proprietary, and that no one even attempted the effort that we did here today.

And so, from that perspective, we felt that it was useful to at least get a benchmark for how Americans felt overall. There certainly can be additional efforts, but to achieve a random sample survey, we followed standard procedure that is done, and they typically are not broken out at this level, for the purposes that you are suggesting, which I believe are obviously worthwhile, and I think could be done. But, just to say, that wasn't initially the purpose of this work.

The CHAIRMAN. You indicate you're going—you're undertaking another survey. Will that be—

Mr. GOLDSTEIN. We're undertaking additional work. We have not determined yet, and I think we will in discussing with your staff and committees in the House that we're also doing this work for, exactly what the methodology we would use to do that. It may be that we do a survey, yes sir.

The CHAIRMAN. But you said you were going to do a survey. You said you were going—in your testimony, you said you were going to do another survey.

Mr. GOLDSTEIN. Sir, we have not made that decision. I don't think we—

The CHAIRMAN. Well, then I think you should make that decision, and you should make that decision that it should not be a random survey, but a very specified survey—

Mr. GOLDSTEIN. OK.

The CHAIRMAN.—based upon very obvious factors, that is people, their ages, their incomes, their locations, their, you know, all the rest of it. It's not—it's not rocket science, but the results of it are incredibly important to telling the industry and the American people—should they be interested, if they want to complain, if they know where to complain—what they need to know.

For example, it's statistically sound, on a national basis, to do that, take a random survey. But are the results of the GAO, representative of the experiences and opinions of residents of rural communities? You don't know the answer to that.

Mr. GOLDSTEIN. That is correct, we do not know that. As I said, this particular survey was not designed to attain that information.

The CHAIRMAN. Well, if by chance there is a next one, which I hope there will be, please make it that way.

Mr. GOLDSTEIN. Certainly.

The CHAIRMAN. Or else we won't know what to do.

Just to finish up, according to your testimony, only 13 percent of wireless phone users would complain to the FCC if they had a problem their carrier could not resolve. And 34 percent of people do not know where they would complain. Now that's a bit gloomy, so my question to you is, to whom would the remaining 53 percent of the consumers turn, where would they turn?

Mr. GOLDSTEIN. We do have a short list of where they would turn. We did ask. Thirty-eight percent would complain only to their wireless carrier, 34 percent did not know, 13 percent said they would complain to the FCC, 4 percent to the FTC, the Federal Trade Commission, 3 named another Federal agency or—without actually saying what it would be—13 percent said they would complain to their State, 20 percent said the Better Business Bureau, and 4 percent said some other consumer organization.

The CHAIRMAN. But on the other hand—I mean, I have read where people call up their—their radio stations and they call up their fire departments, or their police departments, trying to get help. Obviously they—they're not going to find any help there.

Mr. GOLDSTEIN. Sure.

The CHAIRMAN. So, they have to be the—they have to be the right kind of places and only the right kind of places that can give them help, because if they don't get help from the first place, they're not going to try again. And where you have people with relatively low incomes and relatively hard to reach places, that's a very serious matter.

Well, I'm going to leave it there, but I think we have a lot of work to do. Again, I assume I'm right in saying this is the fastest growing industry in the United States. Am I right?

Mr. GOLDSTEIN. It's among the fastest, I could not say if it's the fastest, but it's certainly rapidly growing, because the numbers we've talked about indicate that.

The CHAIRMAN. So—so it would seem to me that logically, therefore, we would be at, particularly at this point and hopefully before, have been putting every single bit of focus onto how we can break this down to see if it's being done fairly, where we have to do more work, where we may have to cut out special efforts, or whatever, don't you think?

Mr. GOLDSTEIN. I think that's absolutely useful.

The CHAIRMAN. Thank you, sir.

Mr. GOLDSTEIN. Thank you.

The CHAIRMAN. Senator Klobuchar or Senator Warner? No, you already spoke.

Senator Klobuchar?

**STATEMENT OF HON. AMY KLOBUCHAR,
U.S. SENATOR FROM MINNESOTA**

Senator KLOBUCHAR. Thank you very much. Thank you, Mr. Chairman, for holding this hearing.

Mr. Goldstein, as you're running through a people complaint to Senator Kerry, you just said, and the rest complain to Amy Klobuchar. I do think, as members of the Senate, we do get some of these stories and we're well aware of some of the issues that come up. They can go beyond your survey results.

And personal experiences, as Senator Warner was relating, in dropped calls, just this weekend I must have had, probably five times when I was on the cell phone on major interstates where it dropped off. So, when we had our original hearing on this, we actually had one of the CEOs of one of the companies, and I showed a billboard from their company showing that they would have service to connect people around the world, and we showed a cell phone with no bars. So, there are problems still, and I think that lack of competition, as Senator Warner was pointing out, can lead to issues, that people don't really even realize they could get better rates or better service.

Following up on what the Chairman said, this industry has changed so greatly back from the time that, you know, Gordon Gecko in the movie "Wall Street" had a cell phone the size of a briefcase. And now, there are 270 million subscribers, nearly 20 percent of the people in this country only have cell phones, yet the rules really haven't changed.

And that's why Senator Rockefeller and I introduced our bill last year on this—on cell phones. We are very happy that some of the changes were made. I think one carrier changed their early termination policies on the eve of the hearing that we had on the bill, which we greatly appreciated. And there has clearly been some improvements since that time, but as the Chairman noted, I think there is a lot of work to be done. And we were always aware of this issue with consumers not knowing where to complain to or what to do, and I think that was a helpful fact coming out of your survey.

The complaints that I continue to hear, as I said, is that—this issue of early termination fees, I still hear it. I do note that according to your preliminary results, 42 percent of those surveyed, who wanted to, but ultimately did not switch services, found ETFs to be a problem. Were you surprised by that number, that it's that high?

Mr. GOLDSTEIN. I was a little surprised by it. I'd thought that it would not be so. But, you know, it was indicated—19 percent of phone users wanted to switch their service, and among the reasons they did not was the ETFs, and that represents about, almost 16 million people.

Senator KLOBUCHAR. Exactly, and I think what happens sometimes—again, it ties into that other issue of when you buy a phone and you're not quite sure whether the service is going to work or not, which is why part of our bill is to try to improve the information that consumers get when they can—when they buy service.

But the second thing is, people move, they move jobs, and then suddenly their service doesn't work in that area, and it's very burdensome for them to—to try to change. And now we know that both Verizon and AT&T prorate new and renewed contracts by \$5 a month, and this would mean that with a 2-year contract and a \$200 ETF, a consumer would still have to pay \$140 to get out of

that contract, after the first year. And I think if you wonder why people are concerned about it, it's still not really evenly prorated as we would have liked to have done.

And in fact, when you compare it to some local service, which for increasingly number of people it's their only phone, it's much more burdensome. So, that might be why you found that in your survey.

The other thing I wanted to ask you about was the—the filing of the complaint. Now, 21 percent of the phone users who contacted their carriers' customer service were dissatisfied with how the carriers addressed their concerns, is that right?

Mr. GOLDSTEIN. That's correct.

Senator KLOBUCHAR. How do you think we should let consumers know that the FCC is an avenue open to them? Do you have ideas for that?

Mr. GOLDSTEIN. At this point we haven't completed the work, so I'm hesitant to talk about specific recommendations, but it's clear that, as my statement indicated, the FCC is not tracking their own performance in this area, there are no measures that they use to determine how satisfied cell phone users are with their actions in trying to help with carriers. It's also quite unclear exactly what it is FCC is trying to do, when you look at how they've established their process, and what they've told consumers. There are mixed messages on their website and in other venues about what it is consumers can expect from the FCC.

And then, again, when combined with the fact that they don't know how that process is working and how they're helping consumers, it's difficult to really get a handle on it.

I would also add, that one of the actions the FCC has said that they will do is act as mediators between cell phone users and carriers, however, this doesn't appear in the letters that users get or in any other place. So, it's a process that isn't working terribly well, it's inadequate still.

Senator KLOBUCHAR. That must be why our staff's been doing that a lot.

Mr. GOLDSTEIN. I think you're doing that work for them, yes ma'am.

Senator KLOBUCHAR. We had a hearing yesterday with Julius Genachowski and a talk—he talked about the fact that he wants to make the website more accessible, and I think we will add that to his list of things to do, which is to make this piece of it more accessible. It's clearly an issue and I hope that that will be part of your recommendations as we go forward.

I also think you identified—and I'm running out of time, here—but the fact that they weren't tracking which type of complaints, which would, again, be much more helpful as we shape policy on things like the dropped calls and the information. Because right now, it's very difficult to track what exactly the problems are. It's just more our own problems that we have and what we hear from our constituents.

Mr. GOLDSTEIN. Thank you.

Senator KLOBUCHAR. Thank you very much.

The CHAIRMAN. Thank you Senator Klobuchar. I really am fascinated by this FCC thing. I mean, you were asked, what are you doing to let people know where they should call? That's not your

job, that's not your job. You put out reports, you study things, you don't say—take out TV ads, the rest of it.

FCC has quite a lot of money and that is their job. It was like with the DTV thing, it was divided between them and NTIA, and between them they didn't do a horrible job. They didn't do a great job, but it could have been worse.

Why do you think this is? I mean, it's going to change under Julius, I just know it is—I just know it is.

Mr. GOLDSTEIN. Mr. Chairman, I would offer two points. We've done a lot of work on FCC over the years, and almost every single report we do—and I don't think I'm exaggerating—we end up taking FCC to task for their planning and their performance measures and their data collection, whether it's the enforcement program, whether it's junk fax, whether it's DTV, or whether it's cell phone usage. FCC has not seemed, in the years we've been following them, to do a good job in collecting data and determining how to focus their mission and to plan.

I know under previous Chairs, including the most recent Chair, there was ambivalence out of that office as to what their role was, with respect to consumers. And so, I think they don't, and have not in the recent years, set themselves up to see data collection and strong performance measures and management and understanding their mission and the transparency of that role, vis-à-vis the public to be terribly important, at least it certainly isn't exhibited in the programs we've looked at.

The CHAIRMAN. Well, that certainly has to change. I believe there's one point where—if somebody wants to write their carrier, and the question is not spot on, in other words it doesn't locate exactly on something which the carriers is prepared—they simply don't respond, they just don't respond. I mean, this whole thing has to be—in this vast growing industry, with people communicating, industries depending upon it, the country depending upon it, the world depending upon it, we're just going to have to do a lot better job.

With that, I'm going to yield the floor to Senator John Kerry, who will continue this hearing.

**STATEMENT OF HON. JOHN F. KERRY,
U.S. SENATOR FROM MASSACHUSETTS**

Senator KERRY [presiding]. Mr. Chairman, thank you very much. I appreciate it.

I think we're going to call the second panel up at this point in time, and I appreciate, Mr. Chairman, your holding this hearing and the opportunity to focus on this particular aspect of the industry, the exclusive agreements in the wireless industry.

So, if we could have the second panel just seamlessly seat themselves at the table. I'd like to ask each member of the panel if you'd summarize comments in about 5 minutes, and your full testimony will be placed in the record, as if read in full.

While you take your seats, let me introduce this topic, if I can for a moment. First of all, we have a very distinguished panel here to give testimony on an issue that grows in relevance as wireless services become a much bigger part of everyday American life. Needless to say, amazing things are happening with wireless tech-

nology. My colleague on this committee, Senator Warner, who knows something about this field, tells a story about how when he was getting into the cellular business all the big money and smart money was saying it was going to take 30 years to build a wireless network, and how at the end of that period, only 3 percent of the country was going to have wireless phones.

Well, obviously, that is not quite what happened. Today, there are about 270 million cell phone subscribers in America. Eighteen percent of all households rely solely on a wireless phone to communicate. And wireless phones are fast becoming the primary and preferred method of communicating, and they are also becoming indispensable to American life and business.

The market share for smartphones, devices like the iPhone and the Blackberry, has grown from 12 to 23 percent of all handset sales over just the last year alone. And these phones are, as we know, far more like computers in our pockets than, like traditional telephones. And as this revolution continues, and as I listen to people in the field, it's clear that, you know, even further extraordinary things could happen, ranging from just being able to come home and take your Blackberry or iPhone, or whatever it is, and plunk it down in a port, and that port is going to manage a whole lot of things for you at home—conceivably, from the temperature of your home, to the lighting of the fire, to your bank accounts, and a whole bunch of other things.

With that in mind, this panel is going to examine the growing trend of exclusive agreements that are being struck between the four largest wireless carriers and the manufactures of wireless handsets. These carriers account for roughly 90 percent of all wireless subscriptions. And as a result of these exclusive agreements, their customers enjoy access to the latest and the greatest smartphones.

Now, I assure you that what brings us to a hearing, is a genuine desire to have legitimate questions answered. My staff came to me, and a number of folks from different sectors of our economy came to me, raising questions about this. Some suggesting that some kind of legislative fix might be necessary. Frankly, I really am not sure; I don't know the answers to some of the questions that are linked to these issues. And so, this is really the best rationale for why we have hearings. It's to try to get those answers and to get them in a very public way.

At the heart of this are a whole bunch of questions. Is it better or worse for competition? Is it better or worse for innovation? Is it better or worse for the American consumer if the carrier controls the decision over what devices can and can't operate on their network?

More than 40 years ago, the FCC decided, in its seminal *Carterfone* case, that AT&T should not have that kind of control. For those of you in the room who are as old as I am and can remember it, before the *Carterfone* you were stuck with the old black Western Electric rotary phone that you rented or bought from AT&T. And the *Carterfone* ruling opened the wireline network, and in the years following that, we saw an explosion of innovation that included the fax machine, the computer modem, and the cordless telephone. The *Carterfone* decision, in the end, was good for con-

sumers, it was good for the country, and it was good for business. It separated the network from end-use technologies.

Similarly today, when you sit down at a computer and you access a broadband connection, you're not told by your broadband provider that you have to have a Dell or you have to have an HP or an Apple in order to access the network. And when you purchase a wireless phone in Asia or in Europe, you typically don't buy it through a wireless carrier, you purchase it separately from the manufacturer or from an outlet.

So, the panel today is going to explore the issue of exclusive agreements in the U.S. market from both sides of the argument. And I want to thank our witnesses for their willingness to testify on this issue.

I have to tell you, it was not easy to find witnesses willing to testify to the benefits of these exclusive arrangements. And so I greatly appreciate Mr. Roth's willingness to provide his perspective from AT&T, which has famously offered the iPhone exclusively on its network for several years now.

I will tell you that we extended an invitation to every major handset manufacturer, and we were unfortunately turned down in every case. That actually raises more questions than it answers. And I must say, not a smart way to send a signal, frankly, but it does send a signal and I have read it the way I've read it.

On Monday, I sent a letter to the FCC to Acting Chairman Copps, expressing concern over the issue, joined by Senators Wicker, Dorgan, and Klobuchar, all of whom serve on this Committee. And so, we will take the testimony today, with a view of really trying to learn about the impact on our economy and on competitiveness and innovation, regarding these practices.

And we look forward to your testimony.

Senator WARNER. Mr. Chairman?

Senator KERRY. Senator Warner.

Senator WARNER. Just a—I'm not going to be able to stay through the whole balance, so I just want to thank you for doing this hearing, because, you know, as we think about the next round of spectrum allocations and as we—and I think you accurately laid out the point that, you know, the benefits that the country had by having a common set of standards, which everyone could work off of. And this Balkanization that I think we're starting to see in this area, you know, I think you appropriately raise a great concern.

If we would have had the same kind of forethought, for example, on another related area, in healthcare IT, we wouldn't have had the kind of Balkanized systems that now is requiring us to kind of come in after the fact and try to create common standards for healthcare IT. And I would really hate to see us, a few years from now, end up with a Balkanized, system-driven set of wireless communication systems that I think would actually put us at a competitive disadvantage against folks across the world.

So, I'm going to listen to as much of the hearing as I can, but I really appreciate—

Senator KERRY. Well, I appreciate that, particularly coming from you, Senator Warner, because you've got a lot of background in this and knowledge about it, so I would appreciate your participation and your comments.

If we could begin. Mr. Roth, if you'd begin, and we'll just run down the table here. And again, we're very grateful to you being here. There really—this is inquisitive and I look forward to a good, healthy discussion. Mr. Roth?

**STATEMENT OF PAUL ROTH,
PRESIDENT—RETAIL SALES AND SERVICE, AT&T INC.**

Mr. ROTH. Thank you, Senator Kerry.

Senator KERRY. You just pop it on there.

Mr. ROTH. And I'm a technical person.

Senator KERRY. Let me just say, also, I apologize, but I have a previous commitment that's going to require me to leave around 4 o'clock and Senator Klobuchar has graciously accepted to chair at that point in time. So, we'll try and get as much in as we can prior to that.

Thanks.

Mr. ROTH. Yes, sir. Thank you, Senator Kerry.

My name is Paul Roth, and I'm the President of Retail Sales and Service for AT&T, and I do thank you for the opportunity to testify here today. I've been in the wireless industry for about 23 years, and that experience is the basis for my belief that exclusive device deals are really good for consumers. Although much of the interest of my testimonies can be related to the iPhone, I will direct most of my comments in that area.

I believe that consumers benefit from exclusive device deals in three specific ways. They benefit from innovation, lower cost, and more choice. And in my 5 minutes, I'll expand on those and I'd be happy to answer your questions.

First, exclusive deals lead to innovation of both devices and applications. In 2005, then-FCC Chairman Martin, challenged the U.S. industry, it challenged the industry saying that it lagged European and Asian nations in bringing innovation to the United States. And since, we've introduced more exclusive deals. What we've seen is the U.S. has become the leader in producing innovative devices like the iPhone and others. The iPhone is now sold in more than 70 countries worldwide, but it launched first in the United States in June of 2007, more than a year before it showed up in other countries.

And innovation has been more than just devices. Apple's App Store on iTunes, has allowed consumers to personalize their devices and their lifestyle with more than 30,000 applications created, and more than a billion of them downloaded in less than a year. And people quickly went from, "Is that an iPhone?" to, "What's on your iPhone?" as it reflected the consumers ability to personalize the device for their own use.

And other innovative high-speed touch screen devices entered the market in response to the iPhone. I don't believe this competitive response would have occurred, had it not been an exclusive device deal.

Second, exclusive device deals lead to lower prices. Consumers pay well under what AT&T pays Apple for the iPhone. It's a standard U.S. industry practice, where the device is sold below its cost in return for a two-year agreement, for the subsidy that made the initial price possible is recovered over the term of the agreement.

In the past 2 years that the iPhone has been exclusive to AT&T, the price of the iPhone has gone from \$399 to \$299—to \$199, and just last week to \$99, all while exclusive to AT&T. And with the iPhone at \$99, prices of other devices, including other exclusive devices will drop and will continue—have dropped and will continue to drop in response to that.

And exclusive device deals create competition and choice. I want to be clear, AT&T has an open network. You can bring any GSM-based device to the AT&T network today, we'll sell you a SIM card for \$25, and you can work that device on our network.

But, we also travel the world seeking partners who will create innovative devices and bring those to the U.S. We often ask for innovative features or design, which requires the manufacturer to create an entirely new product. And our requirements are often the catalyst for innovation.

To build really new and innovative devices creates risk for manufacturers, and the manufacturers are seeking a partner to share that risk with them. They ask us to commit both technical and financial resources, and make volume commitments, all without the assurance that the device will be a success. AT&T competes with foreign carriers like Deutsche Telecom and Vodaphone for the attention of these manufacturers, to bring innovative devices first to consumers in the United States. It's not an accident that the iPhone launched first in the United States.

We took a risk with Apple on the iPhone, that it would be a big success for consumers, and consumers were the ones who benefited from that. Because these innovative devices are exclusive, competitors are forced to innovate or risk losing customers. It's a cycle where consumers reap the benefits, and carriers and manufacturers carry the risk.

There have been over 30 new smartphones that have hit the market to challenge the original iPhone since it debuted in 2007. Let me repeat that again, there are more than 30 new smartphones, some dubbed iPhone killers, in direct response to the iPhone. And Apple, who started it all with the original 2G iPhone in June of 2007, followed in 2008 with an iPhone 3G, and just followed in—just this last week with the iPhone 3GS, each version better, faster, and less expensive than its predecessor, all while exclusive deals with AT&T.

So, some will frame this issue as—whether it's fair to have exclusive deals or for how long they should be exclusive, as if these iPhone or other innovative devices would have occurred any way. Without exclusive deals, the iPhone and whatever follows next, may not have occurred. And I think consumers are the ones, ultimately, who would suffer from such a policy that would put those restrictions in place.

Thank you for the opportunity to listen to my comments, and I welcome your questions.

[The prepared statement of Mr. Roth follows:]

PREPARED STATEMENT OF PAUL ROTH,
PRESIDENT—RETAIL SALES AND SERVICE, AT&T INC.

AT&T appreciates the opportunity to discuss the competitive dynamics of today's vibrant wireless industry and, in particular, the pro-innovation, pro-consumer model

for bringing next-generation devices to the marketplace. My name is Paul Roth. I am AT&T's President for Retail Sales and Service. In that capacity, I am responsible, among other things, for ensuring that we provide the highest-quality experience possible to our wireless customers. I look forward to discussing these important matters with you.

The wireless business has been one of the great success stories in all of American business, and the wireless industry of today represents a true bright spot in a weakened economy. Now, the industry is on the brink of another huge leap forward, as wireless carriers prepare to invest in even faster networks designed to take advantage of the next round of revolutionary devices and applications. Those multi-billion dollar investments would be put at risk and discouraged, however, if, as some have urged, the government were suddenly to reverse its pro-investment, pro-competition policies and impose intrusive restrictions on these services or the way that service providers and manufacturers collaborate on next-generation devices.

Wireless Competition and Consumer Benefits

Few businesses are more intensely competitive than today's wireless industry. According to the FCC's latest statistics, more than 95 percent of the U.S. population lives in census blocks with at least three competing wireless carriers, and more than half of the population lives in census blocks with at least five competing carriers.¹ The FCC continues to make additional spectrum available, and major new providers, such as Clearwire and the cable companies, continue to enter. As the FCC's detailed annual reports to Congress time-and-again confirm, the wireless marketplace is and will remain effectively competitive.² In fact, as a recent study shows, the U.S. enjoys the *least* concentrated wireless industry of any major industrial country.³

Because of this intense facilities-based competition, output continues to soar and prices continue to fall. There are now 270 million wireless subscribers in the United States, and in 2008 they used more than 2.2 *trillion* minutes—a tenfold increase since 2000.⁴ At the same time, prices have declined precipitously. Revenue per minute has fallen 89 percent since 1994, and U.S. wireless prices are much lower than in any other major industrialized country in the world.⁵

Consumers are also getting far more value for their wireless dollars than they did even a few years ago. Carriers, device manufacturers, and operating system and applications developers compete fiercely to provide consumers with an increasingly broad array of new features, functions and capabilities. This is especially true of wireless broadband services. Carriers have invested tens of billions of dollars in recent years to upgrade their networks to increase speeds and to support a wave of revolutionary new broadband devices and applications. Americans today do not just talk on their wireless “phones”—they surf the Internet, listen to music, send e-mails, edit documents, use GPS-enabled features, watch TV, play games, and much more.

The wireless industry is just beginning to tap these possibilities. Seemingly every month a new and innovative wireless device bursts onto the scene, from the Amazon Kindle—a wireless e-reading device that does not even support voice calls—to wireless mini-laptop computers, medical monitoring devices, and specialized devices tailored to the needs of particular businesses. AT&T alone currently supports specialty devices from more than 100 manufacturers. Because of this intense competition and furious pace of innovation, wireless services are transforming American life.

For its part, AT&T has responded to and, indeed, helped shape these industry dynamics by investing in its networks and offering its customers a broad array of high-quality services and options. AT&T has invested \$38 billion in its wireless and wireline networks in the past 2 years; AT&T's capital expenditures this year alone will exceed \$17 billion—more than any other company in America in *any* industry. AT&T has deployed 3G technology in almost 350 markets, and now has the fastest 3G network in the Nation. AT&T has established thousands of Wi-Fi hot-spots across the country that provide free broadband connectivity to AT&T customers. In addition, AT&T offers an extraordinary variety of wireless devices, which give consumers a choice of capabilities and operating systems and thousands upon thou-

¹ Thirteenth Report, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, WT Docket No. 08–27, ¶2 (January 15, 2009) (“*Thirteenth Report*”).

² *Thirteenth Report*, ¶2.

³ See *The United States and World Wireless Markets: Competition and Innovation are Driving Wireless Value in the U.S.*, Presentation by CTIA—The Wireless Association at 6–7 (submitted in FCC WC Docket Nos. 09–51, May 12, 2009) (“*CTIA Study*”).

⁴ *CTIA Study* at 4, 9.

⁵ *CTIA Study* at 3, 9; *Thirteenth Report*, ¶192.

sands of applications.⁶ And, AT&T has introduced a multitude of consumer-centric policies and product options, including, just to name a few, unlimited calling plans; pro-rated early termination fees; and the freedom and capability to download virtually any application without restriction from the Internet, including the more than 4,000 applications that have been created by third-party developers who have worked with AT&T to optimize those applications for the AT&T network. In fact, it is AT&T policy that customers may use their own compatible wireless devices on the AT&T network.

This multitude of consumer benefits is due to a single factor: competition in the wireless marketplace is white hot. If government continues its thoughtful policies that allow the vibrant marketplace to work, wireless carriers will compete even harder in the coming years to build the wireless broadband networks of the future and to find ways to increase value for their customers. If, on the other hand, government were to impose a new set of restrictions on these services, carriers would be able to undertake fewer of those risky, multi-billion dollar investments—which, in turn, could well stymie any economic recovery. Neither Congress nor the FCC should try to “fix” one of the few things in the American economy that is not broken.

Exclusive Handset Distribution Arrangements

Calls for the government to dictate the terms of contracts for handset distribution between device manufacturers and carriers should be rejected. The reasons for this are simple and compelling: the current business and regulatory framework—which allows service providers and device manufacturers to partner and share risks to develop the most compelling devices—ensures innovation, lower prices, and choice. Regulations that would prohibit or nullify these critical partnerships would serve only to harm consumers, as devices would devolve into the lowest common technological denominator and the key pillars of wireless competition would evaporate.

Wireless carriers battle fiercely to attract and retain customers. Each carrier strives to differentiate its offerings from those of its rivals by offering more attractive service plans, improved coverage and service quality, innovative features and content, and a mix of handsets that it believes will best meet consumers’ widely varying needs. And, as is common in highly competitive industries, wireless competitors sometimes seek to set themselves apart through exclusive offerings—*i.e.*, a wireless carrier may ink a deal with a like-minded manufacturer to be the exclusive distributor of a new handset in the hope that it will prove popular.

It is widely recognized in economics and the law that such exclusive distribution arrangements, which have been a feature of the U.S. wireless marketplace since its inception, promote innovation, product differentiation, consumer choice and competition. Exclusive handset distribution arrangements encourage the necessary collaboration that optimizes handset performance and accelerates the delivery of next-generation features. They increase a carrier’s incentives to make purchase commitments and to invest in promotions, network improvements and special training of sales staff. They lower manufacturer entry barriers and serve as a key tool to maintain brand value. And, as an important form of competition, they encourage other carriers and manufacturers to do better, by improving their own handset portfolios or the prices, features and other characteristics of their existing offerings.

Against this backdrop, it should be obvious that consumers would be the ultimate victims of any prohibition on exclusive handset arrangements; indeed, there is no clearer proof of this than the iPhone arrangement, the success of which is exactly what has spawned calls for bans on exclusive arrangements. There is, quite simply, no more dramatic example of an exclusive arrangement creating enormous benefits for all consumers. The popularity of the iPhone and its innovative features and applications has provoked an unprecedented competitive frenzy, palpably accelerating not only handset innovation, but also the pace of wireless broadband investment and applications development. Before the iPhone, mobile handheld “computers” tended to be clunky, expensive devices with traditional applications; now, the marketplace is awash with innovative devices that allow consumers to do things that no one even imagined only a year earlier and that cost consumers less than their more limited predecessors.

Indeed, not 2 weeks ago Palm deployed just the newest potential “iPhone killer,” called the “Pre,” which is provided exclusively by Sprint. Early reviews of the device are positive. Since the Pre’s entry into the market, not only has Apple announced the introduction of an upgraded iPhone—the iPhone S—that will go on sale this week, but also AT&T has reduced the price of the currently available iPhone 3G

⁶See www.att.com/choice. iPhone users alone have downloaded over 1 billion applications from the iTunes applications store in its first year of its existence.

to just \$99.00.⁷ It is the ability of carriers to partner with device manufacturers to bring to market new devices that allow for competitive differentiation that sparks the virtuous cycle of innovation and response.

With the benefit of hindsight it is easy to view the iPhone as only a great boon for AT&T and Apple. In truth, both companies risked a great deal and success surely was not guaranteed. Put differently, the success of the iPhone was not an accident; it was the culmination of a deep collaboration between AT&T and Apple that spanned years, not months, and led to revolutions in the wireless industry. One notable example of this collaboration was the ability of iPhone customers to activate their phones and initiate service simply by logging onto Apple iTunes. For customers, this was a boon, and for the industry it was a game-changer. But it only happened because AT&T and Apple committed the money, resources and countless hours necessary to develop and synchronize the systems and software that enable it. It is highly unlikely either that Apple would have been willing or able to devote the resources necessary to enable the process with dozens or even a few providers, or that AT&T would have risked this time, talent and money, just to see the iPhone available to its competitors.

Notably, another AT&T collaboration on a wireless device evidences the very real risks of failure that faced the iPhone. AT&T teamed with Motorola and Apple to develop a robust wireless device that would also include direct access to iTunes and store up to 100 songs. The companies made significant investments, heavily marketed the device, and fully anticipated that it would be a game-changer. It was not. Despite all the effort, the Motorola ROKR E680 simply did not connect with consumers and failed in the marketplace. It also drove customer defections from AT&T, and is just one of many examples of seemingly promising but ultimately unavailing attempts to compete—examples that are rarely talked about and almost never drive calls for regulatory reform.

Thus, those now calling for bans on exclusive arrangements—and even government abrogation of existing contracts—should ask themselves whether they would be just as willing to repay wireless carriers and handset makers that took risks on new handsets that did not pan out as expected. The answer is, of course, no. And there is likewise no conceivable basis to conclude that it would be in the “public interest” to forgo future opportunities to unleash market forces through exclusive distribution arrangements: heavy-handed intervention in manufacturer and carrier choices would dramatically decrease the chances that consumers would reap the pro-competitive benefits of the next iPhone or whatever other as-yet-unimagined handset innovation is on the horizon.

Finally, even if public policy was concerned with protecting small competitors from competition, rather than protecting competition and consumers, claims that exclusivity prevents smaller wireless carriers from obtaining desirable handsets on terms that allow them to remain competitive are simply false. In fact, an entire industry has developed for the wholesale distribution of wireless handsets to smaller carriers. These wholesale distributors buy in bulk, operate worldwide, and plainly have the clout to obtain favorable terms for popular handsets from the scores of manufacturers that compete in the vigorously competitive global handset market. Thus, even the smallest carriers offer dozens of handsets, from basic voice phones to the highest of the high end, including “smartphones” from multiple manufacturers that include the latest features. And smaller carriers also can (and do) band together to obtain their own handset exclusives. For all of these reasons, exclusivity provides enormous consumer benefits and results in devices and innovations that would not otherwise be introduced.

Senator KERRY. Thank you very much, we appreciate it.
Mr. Rooney?

**STATEMENT OF JOHN E. ROONEY, PRESIDENT AND CEO,
UNITED STATES CELLULAR CORPORATION**

Mr. ROONEY. Good afternoon, Mr. Chairman.

Senator KERRY. Can you push the mike and pull it toward you?

⁷ Should there be any doubt about the importance of this price move, one need only consider its impact in Detroit, arguably the city hardest hit by the current recession. Not surprisingly, sales of all devices, including the iPhone, have been relatively harder to come by in Detroit. Once we reduced the price of the iPhone 3G to \$99.00, however, we rapidly sold out our inventory in Detroit. The point: innovations of all kinds matter, even pricing innovations. Now, the best device is a realistic option for the mass market even in economically hard hit Detroit.

Mr. ROONEY. Is it on?

Senator KERRY. If there's a light on it, it's on. If the light goes on——

Mr. ROONEY. Yes, there we go. It was on.

Senator KERRY. And pull it toward you, if you would, please.

Mr. ROONEY. I'm sorry.

Senator KERRY. Can you pull it toward you? Thank you.

Mr. ROONEY. Good afternoon, Mr. Chairman. It's a privilege to appear before you and the Committee today. My name is John Rooney and I'm the President and Chief Executive Officer of U.S. Cellular. We are the fifth-largest wireless carrier in the United States, serving over 6.2 million customers.

I'm here to talk about the wireless industry's current reality. Four wireless carriers have hijacked consumer access to handset technology. These dominant wireless carriers are leveraging their economic might, to obtain from handset manufacturers the right to be exclusive distributors of the handsets most desired by consumers. These arrangements deny consumers the ability to select a handset, access popular software applications, and use it on a network of their choosing.

The biggest problem is the market for higher-end, iconic phones, and smartphones that are essentially a little computer in your hand, such as Blackberry Storm, and the iPhone. Smartphones represent the fastest growing segment of the industry. As our Nation commits itself to an aggressive deployment of broadband to serve all Americans, it is vitally important that we get the issue of access to mobile wireless handsets right.

Exclusive arrangements are especially damaging to rural citizens, because oftentimes the biggest carriers don't offer any service at all, and so the product is unavailable to that consumer. When rural consumers buy an exclusive phone from one of the bigger carriers, they frequently must accept an inferior network as a tradeoff, a tradeoff no consumer should be compelled to make.

There is harm in urban areas as well. Consumers who desire an iPhone or a Blackberry Storm Smartphone, cannot use it on our network, even if they prefer our service. We do not understand how the public can possibly be served by such a practice.

If you take away nothing else from this meeting, I want you to understand, a central goal of policymakers should be to enable consumers to buy the handset they want and choose the service that best suits their needs. We think the anti-consumer effects of handset exclusivity must be examined in a broader context, to include the entire relationship between these dominant carriers and their handset manufacturers.

Even without exclusiveness, the ability of the dominant carriers to manipulate the handset manufacturers through their purchasing power, to the detriment of all consumers, should be of concern to the Committee.

Under the Telecommunications Act, it is illegal for carriers to engage in unreasonable and discriminatory practices. We ask you to direct the FCC to use these tools you have already given them, to protect consumers from the harms created by exclusive arrangements. Monday's bipartisan letter was a good start.

Now, let me address a few of the objections addressed in this problem that we have heard from the biggest carriers. I have heard that exclusive arrangements drive innovation. This is counter-intuitive. Every manufacturer desires to sell its products to the widest possible audience. If handset exclusivity did not exist, would any manufacturer refuse to invest in great devices, knowing that there's currently a handset market of nearly 300 users in the United States. Any handset maker that invents a great device, receives intellectual property protection, and that confers a tremendous financial incentive to build a winning product.

Others have argued that removing handset exclusivity will kill the incentive to invest risk capital in the handset market. I cannot identify a single market, as large as the U.S. wireless handset business, that needs exclusive dealing to attract risk capital on investment. When you overlay both European and Asian markets available to handset manufacturers, this answer becomes even more problematic.

Turning to the iPhone, Apple does not require their customers to connect their computers only to the ISP of the manufacturers' choice, and who would accept such a proposition for their laptop or personal computer? Well, that's precisely what's happening in this sector. You should not approve of arrangements that limit a wireless consumer's ability to choose what is essentially a handheld computer.

I've been part of the mobile and wireless industry for over 15 years, and until recently, both carriers and handset manufacturers thrived without exclusive arrangements. I believe it is no coincidence that the growth in exclusive arrangements occurred in concert with the acquisition binge of this decade, and the resulting consolidation of market power in the hands of a few.

In closing, we understand that simply banning exclusivity arrangements is not the complete answer. We ask you to look carefully at the bigger picture, the fact that the wireless industry consolidation enables the largest carriers to dominate the product supply chain in ways that harm consumers.

Mr. Chairman, thank you for your interest in this important issue, and I'm happy to answer any questions.

[The prepared statement of Mr. Rooney follows:]

PREPARED STATEMENT OF JOHN E. ROONEY, PRESIDENT AND CEO,
UNITED STATES CELLULAR CORPORATION

Introduction

Good afternoon, Mr. Chairman and members of the Committee. I am John Rooney, President and Chief Executive Officer of United States Cellular Corporation. Thank you for the opportunity to appear before you today. My testimony addresses why the Federal Communications Commission must examine wireless carriers' handset exclusivity arrangements and impose restrictions on these practices. These arrangements harm consumers in rural areas and decrease competition nationwide and do not enhance innovation.

Expanding wireless broadband services is an important public policy, and the dominant carriers' handset practices should not be allowed to continue impeding this goal. We also ask the Committee to examine the business practices of dominant carriers in a broader context, to protect robust competition and ensure that consumers have the ability to choose the handset *and* the network that best suit their needs. We think the bi-partisan letter from some members of this Committee of earlier this week to the FCC requesting expeditious examination of the issue and deci-

sive action if such arrangements are found to unfairly restrict consumer choice or adversely impact wireless competition is a really good step.

Wireless Marketplace

U.S. Cellular provides wireless services in nearly 200 markets located in regional clusters across the country. We serve many of the states represented on this Committee, including: West Virginia, Texas, Maine, California, Kansas, Minnesota, Missouri, Nebraska, Virginia, and Washington. The overwhelming majority of the geography we serve is rural.

We continue to expand our network to increase coverage, call quality and the availability of broadband services. In 2008, U.S. Cellular deployed new cell towers to bring wireless service to unserved and underserved areas in every state where we provide service. As we aggressively upgrade our CDMA networks with third-generation technology (EVDO rev-A), we have been or are likely to be the first provider of broadband wireless services in many rural markets.

Satisfying customers with excellent network quality and customer service is central to U.S. Cellular's operations. For the seventh consecutive time, U.S. Cellular received the J.D. Power and Associates award for overall call quality in the North Central Region. Moreover, people in our service areas increasingly look to our network for advanced wireless services, as shown by the 36 percent increase in our data revenues in the most recent quarter.

U.S. Cellular serves over 6.2 million customers, making us the country's fifth largest wireless carrier. Yet, we are tiny compared to the two wireless industry giants—Verizon Wireless is about 14 times our size, and AT&T is about 13 times larger. Together, these two dominant carriers account for about 60 percent of subscribers nationwide. The next two leading carriers are part of the excessive concentration in this industry—Sprint Nextel is over 8 times our size, and T-Mobile is over 5 times larger. These four carriers, which collectively hold a 90 percent market share, have come to dominate the industry not through superior network quality or efficiency, but rather because the FCC and Justice Department approved a long string of acquisitions in this decade.

Despite their size and huge spectrum holdings, the "Big Four" carriers have decided not to serve many rural areas. These carriers focus on providing service in densely populated urban areas, and their coverage is much more limited in rural areas, especially away from major highways. For example, many rural residents of Alaska, Arizona, Colorado, Idaho, Kansas, Maine, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, South Dakota, Utah, West Virginia and Wyoming are not served by AT&T network facilities. Many rural residents and businesses look to U.S. Cellular and other smaller carriers to provide them with important voice and data wireless services to raise their productivity, give them access to public safety and health care services, and improve their quality of life.

Handset Exclusivity

One manifestation of wireless market concentration is the ability of dominant carriers to tie up almost all of the most advanced, attractive handsets through exclusive arrangements. While U.S. Cellular sells about 3 million handsets annually, each of the two largest carriers sell that many in 4 weeks. The "Big Four" exert their enormous buying and marketing clout over handset manufacturers. Recently, nine of the ten most popular handsets were offered exclusively by one of the "Big Four" carriers.

In rural areas where none of the "Big Four" carriers offers service, their exclusive handsets are simply not available to consumers at any price. Where the "Big Four" have built networks, people who want to use Apple's iPhone have to sign up for service with AT&T and people who want Blackberry's Storm have to take service from Verizon Wireless, even if their prices, network quality, and customer service levels do not measure up to their competitors.

The handset exclusivity period negotiated by the dominant carriers is often 5 years or, in some cases, for the lifetime of the device. In some cases they apply to handsets not yet developed. Handset technologies and features are advancing rapidly, with the lifecycle of handsets averaging about twelve months after initial commercial offering. Consequently, even an exclusive period of 6 months—together with the 5 or 6 months needed to test and launch a handset on another network—can greatly impair the availability of that handset through other carriers.

As I will explain, the dominant carriers' handset practices harm consumers in rural areas and decrease competition nationwide. The remainder of my testimony is organized in three sections: (1) harms to rural consumers and broadband expansion; (2) decreasing competition nationwide; and (3) actions the FCC should take to promote the public interest.

1. Harms to Rural Consumers and Broadband Expansion

The four dominant wireless carriers have locked-up almost all of the advanced, highly desired devices. Consumer harms from these practices are especially severe in rural areas. Since the “Big Four” carriers have decided not to build high-quality networks in many rural areas, many rural residents cannot use some or all of these advanced handsets. Inability to use the best devices impairs business productivity and quality of life for rural residents.

Although U.S. Cellular and other smaller carriers are aggressively expanding their networks and broadband wireless deployment, they cannot offer certain handsets. Many rural consumers are left unsatisfied by inferior wireless service from the “Big Four” and an inability to access the most desirable devices from competitors.

In rural areas where one of the “Big Four” carriers provides service, it can attract customers to its exclusive handsets and services even with higher prices and inferior network coverage. The handset advantage dulls a Big Four carrier’s incentive to invest in improving its service quality and network coverage in rural areas. Moreover, a decision to invest in network facilities that can deliver advanced services is greatly complicated when you cannot offer the most advanced handsets to attract customers.

Despite the public policies and programs supporting comparable telecom services in urban and rural areas, the dominant carriers are consigning rural businesses and residents to second class status for some handset-enabled capabilities. We are not talking about just sleeker cases or cooler video games. For example, some leading education applications for medical professionals and students are only available to AT&T’s customers through the Apple iPhone. These applications and features are not available in many rural areas, even though smaller carriers serve those areas and are eager to provide the most advanced services there.

Congress is to be commended for expanding rural broadband wireless services via the American Recovery and Reinvestment Act of 2009. This legislation wisely provides grants through the Departments of Agriculture and Commerce for broadband wireless infrastructure projects. These projects are vital for the economic health of rural areas and for the economic recovery of the entire nation. Additionally, they can contribute to rural education, health care, public safety services and quality of life. However, infrastructure projects alone will not bring the most advanced wireless broadband services to rural areas. The Federal Government must ensure that rural citizens have reasonably comparable choices in telecommunications products and services. This hearing is an important step in eliminating the detrimental effects on rural areas of the dominant carriers’ handset exclusivity arrangements.

2. Decreasing Competition Nationwide

While rural areas suffer particularly severe harms from handset exclusivity arrangements, these practices hurt businesses and consumers in markets nationwide by lessening competition in wireless services. Smaller carriers are drivers of wireless competition and innovation, but are handicapped by these practices. There is no evidence showing that these practices create significant pro-competitive benefits.

Congress recognized the competitive importance of smaller wireless carriers in directing the FCC to disseminate licenses among a wide variety of applicants and to avoid excessive concentration of licenses. Wisely, Congress sought to avoid the harms to consumers and the Nation from an oligopoly in this critical industry. Nevertheless, the FCC has approved a series of transactions and rules leading to domination of the wireless market by just four carriers. And among those four, two are exerting increasing power with each acquisition. These carriers have recently leveraged their huge subscriber bases and dominant spectrum holdings to obtain exclusive distribution arrangements for almost all of the hottest handsets. While several smaller carriers have been acquired by the Big Four, there are many markets where other smaller carriers remain significant competitors, many markets where smaller carriers are expanding their networks, and many markets where smaller carriers are entering.

Smaller carriers like U.S. Cellular have been able to achieve excellent network quality and offer competitive prices. In part, our success in building competitive networks in rural areas has been a direct result of our participation in the Federal Universal Service program. We have used Federal universal service funds to build cell sites and improve network quality in rural areas that would not otherwise receive such investments. The increased competition in the areas where we are building networks has delivered tremendous consumer benefits including:

- Improved health and safety through our CDMA technology's superior E-911 accuracy, along with improved coverage enabling critical and sometimes life saving calls to be placed;
- Improved economic development opportunities in every area where businesses need mobile wireless services to improve efficiency and productivity;
- Lower prices as a result of our wider local calling areas, enabling many rural citizens to avoid expensive toll charges on competing networks;
- Increased availability and improved telecommunications services encourages all other carriers to improve service quality; and
- Job creation in two areas: (1) jobs created by the construction and operation of new network facilities, and (2) jobs created through the "multiplier effect", that is, the presence of a mobile wireless network driving secondary investments from industries that use our technology.

Economic development benefits described above will increasingly require a smartphone, which is capable of voice, messaging, and Internet access. Many businesses increasingly rely on applications available over the Internet, which cannot be accessed on a traditional telephone device. It is frustrating for rural consumers to be denied the ability to purchase the best smartphone devices and place them on the network that delivers the best coverage. It scarcely bears mention that network quality is important to a business user. Unfortunately, the Big Four's control over the most advanced, attractive handsets has made it significantly harder for smaller carriers to attract and retain subscribers, and to effectively compete in rural areas, even with Federal universal service support.

Our perspective that the "Big Four" carriers have less interest in providing high-quality service to rural communities is borne out by our experience. We know that in almost every area where we are investing Federal universal service funds, our network quality is superior. Beyond just our experience, however, it is important for the Committee to understand that at a time when we are experiencing the worst economic crisis since the Great Depression, a time when job creation and business investment are critical to helping citizens, Verizon Wireless and Sprint have voluntarily agreed to withdraw from receiving Federal universal service support as a condition to approval of large merger transactions.

What is the takeaway from these actions? From our perspective, these carriers may wish to free themselves from the additional regulatory burdens associated with the receipt of universal service support, a valid motive if their business plan does not include providing high-quality service throughout the rural areas where their universal service obligations attach. Our problem is not their choice to forego universal service—it is that we cannot offer the best devices to consumers in areas where we are providing the best network quality.

In this respect, our parochial business interest aligns with the interests of rural citizens, who are paying into the Federal Universal Service Fund and deserve to have the benefits of telecommunications services that are reasonably comparable in quality and price to those available in urban areas. I understand that this is what Congress intended, and that is why we are here. If these practices are allowed to continue, competition in many markets will fall and consumers will pay more for inferior network services.

Of course, the dominant carriers have proclaimed that their exclusive handset arrangements foster innovation and competition. The experience of U.S. Cellular in about 200 markets across the country does not bear out these claims. Moreover, it is counterintuitive that handset manufacturers with access to a customer base of over 300 million users in the United State alone, would want or need exclusive arrangements that limit the pool of potential customers who can buy their products. In fact, we cannot identify a single market the size of the U.S. handset business that requires exclusive contracts to improve innovation and competition.

This Committee would not approve if a rural customer could not buy an Apple computer because it could only be connected to a particular Internet Service Provider that did not serve that customer's home. We see no reason for a different result in the mobile wireless industry. Moreover, handset exclusivity for Smartphones is just the beginning. We are already seeing exclusivity arrangements being used in the market for netbooks, and if Congress takes no action it will likely spread to other device categories as they are invented.

Consumers would benefit if smaller carriers could offer the most attractive handsets and compete with the dominant carriers on the basis of network quality, customer service and price, as well as handset features. Our subscribers who have enjoyed our leading network quality and customer service would not have to choose between, (a) inferior service but the hottest handsets from another carrier, or (b)

remaining with U.S. Cellular but using a less productive set of handset-enabled applications and features. Additionally, manufacturers would be driven to innovate by rapid distribution to the entire base of nearly 300 million handset buyers, including our 3 million sales annually.

Dr. William P. Rogerson (Professor of Economics at Northwestern University and Chief Economist of the FCC in 1998–99) recently examined the arguments and available evidence on this issue. In an economic analysis filed at the FCC in February 2009, he found no evidence showing that any of the “Big Four” carriers played a significant role in advancing handset technology. In particular, he concluded that AT&T played almost no role in developing the iPhone, and that the carrier likely made relatively insignificant network and other investments to support this innovative handset.

As wireless markets have become increasingly concentrated, this handset exclusivity (along with decreased roaming opportunities, high special access rates and certain other practices) has emerged as a major threat to competition in markets nationwide. In the next section, I describe the actions that the FCC must take to address this threat.

3. Actions the FCC Should Take to Promote the Public Interest

U.S. Cellular supports the petition for rulemaking filed by the Rural Cellular Association (RCA) at the FCC over one year ago. Along with consumer groups and most wireless carriers, we urged the FCC to commence a rulemaking proceeding to examine the effects on consumers of exclusivity arrangements between wireless carriers and handset manufacturers, and to adopt rules necessary to promote the public interest in competition, innovation and expansion of broadband services. There is convincing evidence in the record demonstrating the need for the FCC to take these actions. Moreover, we agree with RCA’s position that the FCC has authority under the Federal statute to prevent carriers from engaging in unreasonable or discriminatory practices. We applaud the letter of earlier this week from some members of this Committee urging the FCC to investigate handset exclusivity arrangements to protect consumers.

To date, the FCC has not commenced a rulemaking or restrained the dominant carriers’ harmful handset practices. While this petition has been pending, the FCC approved further industry consolidation for the dominant carriers, via acquisitions by Verizon Wireless, AT&T and Sprint. Two pending transactions would add about 2.6 million subscribers for AT&T. During this period, as the dominance of the “Big Four” increased, they have locked-up almost all of the hottest new handsets, including exclusives for AT&T on new models of Apple’s iPhone, for Verizon Wireless on the Blackberry Storm, for Sprint on the Palm Pre, and for T-Mobile on the Samsung Behold. Rural areas and smaller carriers are suffering from the increased consolidation and these handset practices.

The last time that the FCC looked at wireless carriers’ exclusive dealing contracts with handset manufacturers was in 1992. The FCC decided that it had the statutory authority to regulate such dealings, and promised “if in the future, it comes to our attention that carriers’ exclusive distribution agreements with [handset] manufacturers are resulting in anticompetitive abuse, we will not hesitate to revisit this area.” Not only has the FCC received extensive evidence of anticompetitive abuses in response to the RCA petition, but also the changes in the marketplace warrant prompt re-examination by the FCC.

Subscribers to cellular and similar services have grown from 11 million in 1992 to over 270 million in 2008; each of the two largest carriers now annually sells handsets in volumes that are about four times greater than the total number of cellular subscribers in 1992; these two carriers have through acquisitions come to control about 60 percent or more of handset sales nationwide; wireless devices and services have become critical for business productivity, health care, public safety and other services; about 41 percent of consumers are likely to choose a smartphone for their next mobile device, according to a recent survey; and access to the most advanced handsets is important to achieving rural wireless broadband expansion and competition in markets nationwide.

The FCC’s regulation of landline carriers’ practices regarding customer equipment has been an unquestioned success in spurring competition, innovation and consumer satisfaction. Congress should direct the FCC promptly to examine wireless carriers’ practices in handset exclusivity and take necessary actions to promote the public interest.

Conclusion

I am pleased that this Committee is devoting its attention to the emergence of exclusive handset arrangements for the four dominant wireless carriers, and appre-

ciate the opportunity to testify today. By leveraging their market dominance in negotiations with handset manufacturers, the largest wireless carriers are locking-up almost all of the most advanced, attractive handsets for many months or years. These practices deprive rural areas of leading handset-enabled applications and features, and impede the productivity of rural businesses, important services to rural residents and the expansion of broadband capabilities. Furthermore, these practices impair competition in wireless markets nationwide, and do not enhance innovation. Congress should act so that the FCC promptly examines these practices and adopts rules to eliminate these harms.

Senator KERRY. Thank you, Mr. Rooney, we appreciate it.
Mr. Frieden?

**STATEMENT OF ROBERT M. FRIEDEN, PIONEERS CHAIR
AND PROFESSOR OF TELECOMMUNICATIONS AND LAW,
PENN STATE UNIVERSITY**

Mr. FRIEDEN. Senator Kerry, and members of the Committee, thank you for inviting me to contribute to this discussion about the consumer wireless experience.

I hold the Pioneers Chair and serve as a Professor of Telecommunications and Law at Penn State University. As a teacher, researcher, and cell phone subscriber, I'm working to understand the potential for wireless handsets to stimulate innovation, particularly as these devices become even more widespread and essential.

Three major developments in the wireless marketplace have the most significant impact on consumers and innovation. First, wireless handsets will provide a third screen for users, no less important than what the first screen, television, and the second screen, the personal computer monitor, have provided. Wireless handsets have started the evolution to become a much more diverse Swiss Army Knife collection of features and functions. But the scope of innovation in handset design depends on difficult balancing between the sometimes divergent interests of consumers, carriers, and handset makers.

Second, near-exclusive reliance by wireless carriers and their agents, on a single business model, which combines wireless service and handsets used to access this service, strongly influences what kinds of services the handset can perform and what kinds of software the subscriber can download. This combination of handset and service also creates incentives for carriers to secure exclusive distribution rights for choice devices, such as the Apple iPhone. It motivates carriers to favor ways to recoup their handset subsidies, rather than to concentrate on offering unconditional access to the features within the handset or services available by downloading software and content to the handset.

Third, even as some subscribers resort to self-help strategies to remove these limitations, legislation should direct the Federal Communications Commission to ensure non-discriminatory access to wireless networks and services, including the elimination of handset exclusivity arrangements. Forty years ago, the FCC established the *Carterfone* policy, which specified the right of consumers to own phones and to attach them and other devices, such as fax machines and modems, to the wired telephone network.

This policy made it possible for consumers to decide what type of devices and functions would best serve their needs. More fundamentally, separation of service and equipment allows consumers

to decide how to use the telecommunications and information services available for wireless handsets, now and in the future.

We take for granted the right to attach telephones to the wired network, and that freedom should extend to wireless networks, subject to legitimate and readily addressed network management and spectrum interface concerns. Television broadcasters have no right to restrict consumers from watching cable and DVDs. Likewise, no personal computer manufacturer or software vendor can regulate what consumers see on their monitors and what services they can access. Applying the *Carterfone* policy to wireless would stimulate innovation in handset design, promote competition, and motivate carriers to make their networks more accessible.

Remarkably, the 270 million wireless cell phone subscribers in the United States do not have the same freedoms for the third screen, as they do for television sets, computer monitors, and wired telephone service. If the wireless handset marketplace worked like its wired counterpart, carriers would derive limited benefit from exclusivity—exclusive handset distribution agreements, and they would not program restrictions on the limited types of phones they make available.

Manufacturers would have great reluctance in disabling features or refraining from devising new ones that carriers do not want consumers to have. Applying the *Carterfone* non-discrimination policy does not impose new or additional regulations. Cell phones companies operate as telecommunications service providers, already obligated by law to comply with FCC common carrier regulations. Wireless handsets use radio spectrum, subject to the FCC's jurisdiction.

The FCC has applied its widely respected *Carterfone* policy in many ways and for many different types of competitive industries since 1968, including cable television. Most recently, the Commission included the *Carterfone* open-access policy in its 2005 policy statement on what freedoms consumers have a right to expect when accessing the Internet. Limitations on access can frustrate consumers, stifle innovation in wireless services and software applications, and adversely affect the international competitiveness of U.S. equipment and services.

The potential for Swiss Army Knife versatility in handsets diminishes when carriers and handset manufacturers agree on exclusive handset distribution deals, locks on what functions handsets can perform, and locking out consumers from downloading software and other content. Mandating consumer access freedoms, supports development of separate wireless handset and service markets. This will create incentives for wireless equipment manufacturers to offer customized solutions to diverse user requirements.

Additionally, it will create incentives for wireless carriers to come up with innovative service plans and to compete based on how many different services wireless devices can access.

I appreciate the opportunity to share my views with the Committee and to participate in a discussion about this important issue. Thank you very much.

[The prepared statement of Mr. Frieden follows:]

PREPARED STATEMENT OF ROBERT M. FRIEDEN, PIONEERS CHAIR AND PROFESSOR OF
TELECOMMUNICATIONS AND LAW, PENN STATE UNIVERSITY

Good afternoon Mr. Chairman and Senators. Thank you for inviting me to contribute to this discussion on the consumer wireless experience.

I hold the Pioneers Chair and serve as a Professor of Telecommunications and Law at Penn State University. As a teacher, researcher,¹ observer of student behavior, and cellphone service subscriber, I am working to understand the potential for wireless handsets to stimulate innovation, particularly as these devices become even more widespread and essential.

Three major developments in the wireless marketplace have a substantial impact on consumers and innovation:

1. The wireless handset will provide a “third screen” for users,² no less important than what the first screen, television, and the second screen, the personal computer monitor, have provided. Wireless handsets have started the migration from cordless telephones to a much more diverse “Swiss Army Knife” collection of features and functions. But the scope of innovation in handset design depends on a difficult balancing between the sometimes divergent interests of consumers, carriers, and handset makers.
2. Near exclusive reliance by wireless carriers and their agents on a single business model, which combines wireless service and the handset used to access this service, strongly influences what kinds of services handsets can perform, and what kinds of software subscribers can download. In exchange for the opportunity to use a subsidized handset, wireless subscribers must agree to a one or two year service commitment and accept significant limitations on what services their handsets can access and what features their handsets offer. The ability to combine handsets and service creates incentives for carriers to secure exclusive distribution rights for choice handsets, such as the Apple iPhone. It also motivates carriers to favor ways to recoup their handset subsidies, rather than to concentrate on offering unconditional access to features within the handset, or services available by downloading software and content to the handset.
3. Even as some subscribers resort to “self-help” strategies to remove limitations,³ legislation should direct the Federal Communications Commission (“FCC”) to ensure non-discriminatory access to wireless networks and services, and to order carriers to eliminate handset exclusivity arrangements. Forty years ago, the FCC established its *Carterfone* policy that specified the right of consumers to own phones and to attach them and other devices, such as fax machines and modems, to the wired telephone network.⁴ Applying the *Carterfone* policy to wireless would stimulate innovation in handset design, promote competition, and motivate carriers to make their networks more accessible.

Third Generation Wireless and Beyond

Wireless technology has developed along three generations of service. In the first generation, from 1984 to the early 1990s, analog cellphones almost exclusively provided voice telephone service. The second generation, which approaches its conclu-

¹For more comprehensive examination of wireless handset access to content and services, see Rob Frieden, *Lock Down on the Third Screen: How Wireless Carriers Evade Regulation of Their Video Services*, 23 BERKELEY TECHNOLOGY LAW JOURNAL (2009) (in production); draft available at: http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=102928; *Hold the Phone: Assessing the Rights of Wireless Handset Owners and Carriers*, 69 PITTSBURGH LAW REVIEW, No. 4, 675–725 (2008); draft available at: http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=102928; *Wireless Carterfone—A Long Overdue Policy Promoting Consumer Choice and Competition* (New America Foundation, Wireless Future Program, Working Paper No. 20), available at http://www.newamerica.net/files/Wireless_Carterfone_Frieden.pdf.

²See, e.g., Nick Wingfield, *Time to Leave the Laptop Behind*, THE WALL STREET JOURNAL, (Oct. 27, 2008), available at <http://online.wsj.com/article/SB122477763884262815.html>, Int'l Telecommunication Union, The Regulatory Environment for Future Mobile Multimedia Services, <http://www.itu.int/osg/spu/ni/multimobile/index.html>.

³Wireless subscribers violate service contracts and lose warranty coverage when they “unlock” their handsets for use on unauthorized networks. Wireless subscribers “jailbreak” a handset “which allows a user to install on his device third-party applications unapproved by the provider.” See Sarah Perez, *Why You Have To Jailbreak the iPhone*, N.Y. TIMES (Jan. 12, 2009), http://www.nytimes.com/external/readwriteweb/2009/01/12/12readwriteweb-why_you_have_to_jailbreak_the_iphone.html.

⁴See *Hush-a-Phone v. United States*, 238 F.2d 266, 269 (D.C. Cir. 1956) (ordering the FCC to eliminate telephone company tariff restrictions on customers’ right to attach non-electronic acoustic devices to telephones). In 1968, the FCC extended the right to include attachment of electronic devices. Use of the *Carterfone* Device in Message Toll Tel. Serv., 13 F.C.C.2d 420 (1968), *recon. denied*, 14 F.C.C. 2d 571 (1968).

sion, offers digital technologies capable of providing many enhancements, including text messaging, music downloading, photography, and slow speed access to the Internet. The third generation, promises a variety of features at least in theory no less numerous and diverse than what consumers can access via computers and television sets.

I use the phrase “in theory,” because the combination of handset and service enables wireless carriers to impose limitations on what handsets subscribers can use, the functions performed by these handsets, and what applications subscribers can download to their handsets. Even the much-touted Apple iPhone has significant limitations. Apple now offers over 30,000 diverse applications,⁵ quite a large number as compared to what other handsets can download. But consider 30,000 in the context of the millions of applications available via personal computers. Innovators with hopes for offering the next “killer application” have limited prospects if one or more of the major wireless carriers choose not to allow subscribers to access the service, or download the software.

The list below identifies many of the handset limitations wireless carriers have imposed:

- Locking handsets so that subscribers cannot access competitors’ networks (by frequency, transmission format, firmware, or software). Some carriers even lock handsets designed to allow multiple carrier access by changing an easily inserted chip, commonly referred to as the Subscriber Identity Module;

- Using firmware “upgrades” to “brick,” *i.e.*, render inoperative, the handset, or alternatively disable third-party firmware and software;

- Disabling handset functions, *e.g.*, bluetooth, Wi-Fi access, Internet browsers, GPS services, and e-mail clients;

- Specifying formats for accessing memory, *e.g.*, music, ringtones, and photos;

- Creating “walled garden” access to favored video content of affiliates and partners; and

- Using proprietary, non-standard interfaces making it difficult for third parties to develop compatible applications and content.

The most recent limitation affects when and how iPhone subscribers can use their handsets to access services that provide voice communications via the Internet, a service commonly referred to as Voice over the Internet Protocol (“VoIP”).⁶ AT&T will allow subscribers to exploit VoIP innovation supplied by Skype, when they have Wi-Fi Internet access, currently available in various standalone “islands” such as coffee shops, libraries, hotels, offices, and residences. However, once a subscriber no longer has Wi-Fi access, the iPhone contains programming that blocks access to Skype via the AT&T wireless network.⁷ Additionally, AT&T has not yet set a date when iPhone subscribers can activate built-in features in their handsets to link laptop computers with the Internet via their phone, or to offer enhanced multimedia messaging.⁸

AT&T, to its credit, wants to promote a robust, versatile, and innovative wireless handset, an interest in synch with that of Apple, its manufacturing partner, and with consumers. But AT&T part ways when handset innovation prevents it from maximizing revenues and profits in providing long distance telephone services, particularly costly international calls. Skype offers free international VoIP calls when both parties use the Internet, and retails service at pennies-a-minute when a call leaves the Internet and travels via conventional telephone networks. AT&T and other wireless carriers charge a substantially higher rate for international calls.

Wireless subscribers suffer when carriers and handset manufacturers lack clear incentives to offer the most versatile services and handsets possible. Understand-

⁵ See Apple, Inc., App Store and Applications for iPhone, <http://www.apple.com/iphone/appstore/>.

⁶ Voice over the Internet Protocol (“VoIP”) offers voice communications capabilities, much like ordinary telephone service, using the packet-switched Internet, for all or part of the link between call originator and call recipient.

⁷ Brad Stone, *Skype, the Web Phone Giant, Brings Cheap Calls to Cellular*, THE NEW YORK TIMES, Internet, Inside Technology (March 29, 2009); available at: <http://www.nytimes.com/2009/03/30/technology/internet/30skype.html>.

⁸ “Tethering is the ability to connect your mobile phone (either wirelessly, over Bluetooth, or via a cable) to your PC and use it as a wireless modem. MMS is a format for sending multimedia, such as photos, over the wireless network. In both cases Apple displayed lists of carriers around the world who would support these features, and AT&T was not on them.” Brad Stone, *AT&T: Tethering and MMS Coming to the iPhone*, THE NEW YORK TIMES, Technology, Bits, (June 8, 2009); available at: <http://bits.blogs.nytimes.com/2009/06/08/att-tethering-and-mms-coming-to-the-iphone-in-us/>.

ably, wireless carriers need to recoup subsidies in handsets and to offer new services, in addition to offering the basic commodity of wireless transmission time. But when carriers and handset manufacturers can readily implement strategies to lock down handsets, and to lock out consumers from competing services and features, the potential for Swiss Army Knife versatility in handsets diminishes.

Bear in mind that the limitations imposed by wireless carriers apply regardless of whether a subscriber uses an unsubsidized handset, and these restrictions extend even after completion of the service commitment by subscribers using subsidized handsets. I know of no wireless carrier in the United States that offers lower rates, and more relaxed software and third-party access policies for subscribers who activate service with an existing handset, thereby freeing the carrier of having to make a subsidy. These type subscribers pay the same rates, on a month-to-month basis, as subscribers reimbursing carrier subsidies.

Liberating Handsets and Spurring Innovation

Consumers' right to own and attach any technically compatible device will spur competition and innovation in the development of handsets and other devices, as well as the software that can customize services. The FCC's *Carterfone* policy, established in 1968, made it possible not only for consumers to consider the telephone a fashion accessory, but more importantly, to have the freedom to decide what types of devices and functions would best serve their needs. More fundamentally, separation of service and equipment supports consumers in their freedom to decide how to use the telecommunications and information services available from wireless handsets now and in the future.

We take for granted the right to own and attach telephones to the wired network and that freedom should extend to wireless networks, subject to legitimate and readily addressed network management and spectrum interface concerns. Television broadcasters have no right to determine how consumers use their television sets, including accessing video content from competing sources such as cable television and DVDs. Likewise, no personal computer manufacturer or software vendor can regulate what consumers see on their monitors and what services they can access.

Remarkably, the 270.3 million wireless cellphone subscribers in the United States⁹ do not have the same freedoms for the third screen as they do for television sets, computer monitors, and wired telephone service. If the wireless handset marketplace worked like its wired counterpart, carriers would derive limited benefit from exclusive handset distribution agreements, and they could not program restrictions on the limited types of phones they make available. Manufacturers would have great reluctance in disabling features, or refraining from devising new ones that carriers do not want consumers to have.

Applying *Carterfone* Policy to Wireless Service Promotes Innovation, Helps Consumers, and Offers Carriers the Opportunity to Pursue Different Business Models.

Wireless carriers seem to perceive a wireless *Carterfone* policy as technologically infeasible, imposing more regulation, guaranteeing greater subscriber churn, and adversely impacting profitability. Just as wired carriers did in the 1960s, wireless carriers dismiss any likelihood that separating handsets from service providers will generate more opportunities to develop networks that stimulate usage, customer loyalty, and diversification of services available from a wireless network. I see no basis for concluding that the upside benefits accruing from the wired *Carterfone* policy somehow will not apply to wireless networks.

The wired *Carterfone* policy triggered widespread innovation in handsets and other devices located on customer premises. Such advancement did not shut down parallel progress in wired telecommunications, but instead promoted increased network use by a diversifying array of equipment. Rather than cause harm to telephone employees and networks, consumers' freedom to attach devices of their choice enhanced the utility of the network and the satisfaction of subscribers with the network.

When we move from a discussion about the benefits of wired *Carterfone* to wireless networks, carriers seek to frame the issue as one involving burdensome regulatory intrusions,¹⁰ unnecessary and inappropriate in light of how competitive, inno-

⁹ CTIA, The Wireless Association, *Wireless Quick Facts* (as of Dec., 2008); available at: <http://www.ctia.org/advocacy/research/index.cfm/AID/10323> [hereinafter cited as CTIA Wireless Quick Facts].

¹⁰ A prominent *Wall Street Journal* industry analyst has concluded that the wireless carriers have succeeded in creating the inference that they are unregulatable:

A shortsighted and often just plain stupid Federal Government has allowed itself to be bullied and fooled by a handful of big wireless phone operators for decades now. And the result has

vative, and successful the wireless industry has become. Applying the *Carterfone* policy does not impose new, or additional regulations. Cellphone companies operate as telecommunications service providers, already obligated by Title II¹¹ and III of the Communications Act of 1934, as amended, to comply with FCC common carrier regulations.¹² The fact that wireless carriers now offer information and video services does not diminish their common carrier responsibilities.¹³

Wireless carriers also assert that the *Carterfone* policy had a legitimate and necessary function only back in the time when a monopoly Bell System dominated all aspects of telephone service. The FCC has applied its “venerable,”¹⁴ longstanding,¹⁵ and “widely respected”¹⁶ *Carterfone* policy in many ways and for many different types of competitive industries well after divestiture of AT&T and its Bell System. For example, the FCC included the *Carterfone* open access concept in the Commission’s 2005 Policy Statement of what freedoms consumers have a right to expect when accessing the Internet.¹⁷ The Commission also established an “Open Platform” requirement for a portion of the choice 700 MHz spectrum made available by the conversion to digital television.¹⁸ Speaking of digital television, the FCC established a long conversion period, and Congress extended it,¹⁹ so that consumers could acquire the necessary digital converter to continue watching broadcast television without having to replace their existing analog sets.²⁰

The FCC has ordered cable television companies to continue offering service to “cable ready” analog televisions that do not require installation of a set top box.²¹

been a mobile phone system that is the direct opposite of the PC model. It severely limits consumer choice, stifles innovation, crushes entrepreneurship, and has made the U.S. the laughing-stock of the mobile-technology world, just as the cellphone is morphing into a powerful handheld computer. . . . That’s why I refer to the big cellphone carriers as the ‘Soviet ministries.’ Like the old bureaucracies of communism, they sit athwart the market, breaking the link between the producers of goods and services and the people who use them.

Posting of Walt Mossberg to All Things Digital (Mossblog), *Free My Phone*, (Oct. 21, 2007) available at: <http://mossblog.allthingsd.com/20071021/free-my-phone/>.

¹¹Title II of the Communications Act, as amended, 47 U.S.C. § 201 *et. seq.* (2008) requires providers of basic telecommunications services to operate on a nondiscriminatory basis, providing services on just and reasonable charges and also subject to numerous entry regulations, tariffing, interconnection, and operating requirements.

¹²*See* Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, 107 Stat. 312, Pub. L. No. 103-66, Title VI, § 6002(b), amending the Communications Act of 1934 and codified at 47 U.S.C. § 332(c) creating a hybrid, streamlined regulatory classification for Commercial Mobile Radio Service Providers, commonly known as cellular telephone carriers. The term “commercial mobile service” is defined by the Communications Act of 1934, as amended, as “any mobile service . . . that is provided for profit and makes interconnected service available: (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public, as specified by the Commission.” Communications Act § 332(d)(1), 47 U.S.C. § 332(d)(1)(2008). “Mobile service” is defined at Section 3 of the Act. Communications Act § 3(27), 47 U.S.C. § 153(27)(2006). The term “commercial mobile service” came to be known as the “commercial mobile radio service.” 47 C.F.R. § 20.3(2008).

¹³*See* Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd. 15817 (2007).

¹⁴“[O]ur venerable *Carterfone* principles, for example, were first established via adjudication and then codified into rules.” Formal Complaint of Free Press & Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications, 23 FCC Rcd.13028, 13050 (2008) available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-183A1.doc [hereinafter cited as Free Press Complaint].

¹⁵*See, e.g., Pub. Util. Comm’n of Tex. v. FCC*, 886 F. 2d 1325, 1329 (D.C. Cir. 1989) (noting long established FCC policy that carriers and non-carriers alike have a Federal right to interconnect to the public telephone network in ways that are privately beneficial if they are not publicly detrimental); *Am. Tel. & Tel. Co.’s Proposed Tariff Revisions*, 53 F.C.C.2d 473, 477 (1975), *aff’d sub nom. Mebane Home Tel. Co. v. FCC*, 535 F.2d 1324, 1329 (D.C. Cir. 1976); *Telerent Leasing Corp.*, 45 F.C.C.2d 204, 205 (1974), *aff’d sub nom. N.C. Util. Comm’n v. FCC*, 537 F.2d 787 (4th Cir. 1976), *cert. denied*, 429 U.S. 1027 (1976).

¹⁶“[T]he Commission adopted the widely respected *Carterfone* principles via adjudication.” Free Press Complaint, 23 FCC Rcd. at 13045.

¹⁷“Internet, consumers are entitled to connect their choice of legal devices that do not harm the network.” Appropriate Framework for Broadband Access to the Internet Over Wired Facilities, Policy Statement, 20 FCC Rcd. 14986, 14988 (2005).

¹⁸Service Rules for the 698–746, 747–762 and 777–792 MHz Bands, Second Report and Order, 22 FCC Rcd. 15289(2007).

¹⁹DTV Delay Act, Pub. L. No. 111–4, 123 Stat. 112 (Feb. 11, 2009).

²⁰Implementation of the DTV Delay Act, MB Docket No. 09–17, Third Report and Order and Order on Reconsideration, 24 FCC Rcd. 3399 (2009).

²¹FCC rules ensure “that all cable TV viewers, including the 98 million analog-only cable TV viewers, retain the same access to their local stations after the transition as they have today. The rules require cable operators to comply with the statutory viewability requirement by choosing to either: (1) carry digital signals in analog format, or (2) for all-digital systems, carry the

Continued

Additionally, the FCC prevents device lock in by requiring cable television operators to support CableCard access to programming in lieu of mandatory leasing of a cable company supplied set top box for watching digital television service tiers.²² To guard against cable operators exploiting the ability to favor content created by affiliates, Congress prohibited exclusive program access deals.²³ Even in the wireless marketplace, the FCC has mandated number portability to prevent locking in subscribers by preventing them from using the same telephone number when shifting carriers.²⁴

Wireless carriers appear to have concluded that applying the *Carterfone* policy could lead to higher rates of customer churn, because fewer subscribers might acquire a subsidized phone and accordingly would not have to commit to a one-, or two-year term of service. The policy does not absolutely guarantee increases in churn, particularly if wireless carriers work harder to customize service, to respond to consumers' diverse service requirements, and to provide service via any functioning handset. Wireless carriers would have to consider implementing alternative business models, including ones where customers initiate service using an existing handset instead of using a new one subsidized by the carrier. Under this scenario, the carrier might have to offer a discounted rate, but service diversification and discounting constitute two strategies any business must consider in a maturing market.

After having achieved a nearly saturated market of 87 percent penetration,²⁵ wireless carriers should consider service diversification and as well differentiating their brand by something other than the likelihood of getting reliable service and the handset choices they offer.

Conclusions and Recommendations

Technological and marketplace convergence favor increasing reliance on the Internet as a medium for delivering all kinds of information, communications and entertainment services. Already the Internet makes it possible for carriers and consumers to combine traffic onto a single Internet conduit in lieu of using separate networks to carry voice, data, and video traffic. Wireless access to the Internet, via next generation networks, will offer consumers the potential to use a truly broadband information superhighway.²⁶ However, if wireless carriers continue to limit subscribers' handset options, the breadth and scope of wireless access will not achieve parity with wired alternatives.

I see no compelling case why wireless networks should not offer consumers the same access opportunities as available from wired broadband networks. Any limitations on access can frustrate consumers, stifle innovation in wireless services and software applications, and adversely affect the international competitiveness of

signals only in digital format, provided that all subscribers have the necessary equipment to view the broadcast content. The viewability requirements apply from June 12, 2009 through February 2012, subject to review by the Commission during the last year of this period. Carriage of Digital Television Broadcast Signals: Amendment to Part 76 of the Commission's Rules, CS Docket No. 98-120, Third Report and Order and Third Further Notice of Proposed Rule Making, 22 FCC Rcd 21064 (2007).

²²"[A] CableCARD . . . plugs into a slot in a host navigation device, permitting the device to perform both the security and non-security functions." *Charter Communications, Inc. v. Federal Communications Commission*, 460 F.3d 31, 34 (D.C. Cir. 2006) available at: http://www.cesweb.org/shared_files/edm/2006/govalert/DCCircuitAdvanceNewhousevFCCOrder081806.pdf.

²³See Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Development of Competition and Diversity in Video Programming Distribution: Section 628(c)(5) of the Communications Act: Sunset of Exclusive Contract Prohibition, MB Docket No. 07-29, Report and Order and Notice of Proposed Rulemaking, 22 FCC Rcd. 17791 (2007).

²⁴"The ability of end users to retain their telephone numbers when changing service providers gives customers flexibility in the quality, price, and variety of telecommunications services they can choose to purchase. Number portability promotes competition between telecommunications service providers by, among other things, allowing customers to respond to price and service changes without changing their telephone numbers. The resulting competition will benefit all users of telecommunications services. Indeed, competition should foster lower local telephone prices and, consequently, stimulate demand for telecommunications services and increase economic growth." Telephone Number Portability, CC Docket No. 95-116, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8352, 8368 (1996).

²⁵CTIA, Wireless Quick Facts.

²⁶"Few doubt that the future of telecommunications will rely mostly on broadband and wireless technologies. Wireless and broadband technologies are transforming the telecommunications market, offering users ubiquitous access to voice, data, and Internet services. The number of mobile subscribers has already surpassed that of end-user switched access lines served by local exchange carriers." National Regulatory Research Institute, *Methods for Analyzing the Effects of Broadband and Wireless Services on Competition in Local Telephony*, Project Announcement; available at: <http://www.nrri.ohio-state.edu/current-projects/telecommunications/methods-for-analyzing-the-impact-of-broadband-and-wireless-services-on/>.

United States equipment and services. Many nations do not permit the bundling of wireless service and handsets. Such separation does require wireless consumers initially to pay more for their handsets, in light of the absence of a carrier subsidy. But bear in mind that because U.S. wireless carriers do not operate as charities, consumers surely pay for their upfront subsidy over the one-, or two-year service commitment. In nations prohibiting the bundling of handsets and service, carriers typically offer a broader array of service plans, including many more pre-paid, calling card opportunities for low volume callers.

Mandating consumer access freedom supports development of separate wireless handset and service markets. This will create incentives for wireless equipment manufacturers to offer customized solutions to diverse user requirements. Additionally, it will create greater incentives for wireless carriers to come up with innovative service plans, and to compete based on how many different services wireless devices can access.

Senator KERRY. Thank you very much, we appreciate it, Mr. Frieden.

Ms. Esbin?

**STATEMENT OF BARBARA S. ESBIN, SENIOR FELLOW
AND DIRECTOR OF THE CENTER FOR COMMUNICATIONS
AND COMPETITION POLICY, THE PROGRESS & FREEDOM
FOUNDATION**

Ms. ESBIN. Thank you, Senator Kerry, and members of the Committee for the opportunity to testify on the issue of wireless handset exclusivity. My name is Barbara Esbin, I'm a Senior Fellow at the Progress and Freedom Foundation, a think-tank focused on the digital economy.

My research indicates that exclusive handset arrangements have brought palpable benefits to both consumers and competition within the wireless sector, because both the wireless services and handset markets are robustly competitive and show no evidence of market failure, a regulatory prohibition on such exclusive arrangements would be ill-advised. Consumers will remain protected from demonstrable anti-competitive activity or unfair and deceptive practices in this sector by our anti-trust and consumer protection authorities.

The FCC has repeatedly found the wireless marketplace to be effectively competitive, not perfectly competitive, but effectively competitive. The most recent report found that over 90 percent of U.S. residents live in areas served by four or more mobile carriers and that, "Consumers continue to reap significant benefits, including low prices, new technologies, improved service quality, and choice among providers of commercial mobile radio services."

The level of concentration in the U.S. wireless carrier market is below that of other nations and below the usual level of concern for the anti-trust authorities. The wireless handset market is even more robustly competitive. There are hundreds of models sold in the U.S., manufactured by 33 companies. No single firm appears to have market power in the handset market, and certainly no single firm may be viewed as the sole source of innovation.

The typical exclusive handset agreement grants the carrier an exclusive distribution right for a particular handset model or a set of features for a limited period of time. Carriers are willing to pay for exclusive arrangements, because offering subscribers a hot new handset is a way to differentiate their service.

The FCC has acknowledged that product differentiation is a natural competitive response by carriers to customer churn. Churn itself is a sign of competition and the exclusive arrangements are simply a feature of an intensely competitive market.

Handset manufacturers benefit from the exclusives by being able to develop the initial version of a device for one type of network, ensuring both speed to market and some control over the user experience. Guaranteed minimum orders from the manufacturer, another common feature, can remove some of the risks associated with a new product offering, thus permitting riskier and more innovative designs. Each side of the exclusivity transaction benefits, but more importantly, consumers benefit in terms of gaining innovative handset features, applications, and services.

Analysts have noted that the exclusives are fairly good from the consumer standpoint, because guaranteed distribution incentivizes the carriers to heavily promote the product and offer subsidies to lower the price of the phone for consumers. Prohibiting such arrangements and effectively mandating that all offerings look the same would leave the carriers with fewer options to attract customers. Over the long term, it would likely lessen rather than enhance competition and consumer welfare.

Indeed, since 1992, when there were only two mobile carriers per region and far fewer equipment manufacturers, the FCC has permitted exclusive handset arrangements in light of competition in the relevant markets.

Today's wireless carriers, facing far greater service competition and increased numbers of suppliers, have even less economic power to stop equipment manufacturers from working with other carriers. In the case of the iPhone, for example, it was Apple, a new entrant with a single handset, who sought exclusivity and tightly-controlled product development, rather than AT&T.

Exclusivity is far from a rarity in the world of cell phones and is not a practice limited to large carriers. Even some mobile virtual network operators have successfully obtained such agreements, which one would not expect if these arrangements were the result of the exercise of market power.

The dynamic created by exclusive handset arrangements has allowed equipment manufacturers and carriers to bridge the gap between the technologies of today and the disruptive innovations of tomorrow. If exclusive arrangements were to be prohibited today, we would run the risk that all Americans will miss out on the dramatic benefits of innovation tomorrow, thus banning exclusive arrangements would effectively spite all consumers by ensuring that if some consumers can't have the fruits of device innovation immediately, then none may.

I respectfully submit that upon further development of the record, neither Congress nor the Commission will find the need for additional action on the matter of exclusive handsets.

Thank you again for the invitation to testify and I welcome any questions.

[The prepared statement of Ms. Esbin follows:]

PREPARED STATEMENT OF BARBARA S. ESBIN, SENIOR FELLOW AND DIRECTOR OF THE
CENTER FOR COMMUNICATIONS AND COMPETITION POLICY, THE PROGRESS &
FREEDOM FOUNDATION

I. Introduction

Chairman Rockefeller, Ranking Member Hutchison, and members of the Committee, good afternoon and thank you for inviting me to discuss the issue of handset exclusivity arrangements. My name is Barbara S. Esbin, and I am a Senior Fellow at the Progress & Freedom Foundation, a non-profit think tank that is focused on the digital economy. As Director of PFF's Center for Communications and Competition Policy, I have endeavored to develop and advocate an evidence-based policy framework that relies to the maximum extent possible on competitive forces to achieve next generation infrastructure deployment and service innovation in the communications industries. Prior to joining PFF, I spent over fourteen years as a regulatory attorney at the Federal Communications Commission, where I held a variety of senior staff positions with the Common Carrier, Wireless Telecommunications, Cable Services, Media, and Enforcement Bureaus.

My testimony will focus on the ongoing debate about exclusive handset arrangements and their role in the consumer wireless experience. On the basis of my research into the issue, it is my conclusion that the wireless service and handset markets are effectively, if not robustly, competitive; that exclusive handset arrangements have brought palpable benefits to both consumers and competition within the wireless sector; and that regulatory intervention to prohibit such arrangements would be ill-advised. Any actual consumer harm arising from demonstrable anti-competitive activity or unfair and deceptive practices would be better handled through our antitrust and consumer protection authorities.

II. The Wireless Service and Handset Markets are Thriving

In January of this year, the FCC's Wireless Telecommunications Bureau released its Thirteenth Annual Report on the state of competition in Commercial Mobile Radio Services. It found that there is effective competition in the CMRS market and that "U.S. consumers continue to reap significant benefits—including low prices, new technologies, improved service quality, and choice among providers—from competition in the CMRS marketplace, both terrestrial and satellite CMRS." American consumers may receive service from a host of national, regional, and small providers, including dozens of mobile virtual network operators (MVNOs). According to the report, "there was an approximate 8 percent increase in the percentage of the U.S. population with access to *five or more* different mobile telephone operators in 1 year, from nearly 57 percent at the end of 2006 to almost 65 percent at the end of 2007. Moreover, approximately 96 percent of the total U.S. population lives in areas where three or more different operators compete to offer mobile telephone service in some parts of those counties, while nearly 91 percent of the U.S. population continues to live in counties with four or more mobile telephone operators competing to offer service." According to information compiled by CTIA—The Wireless Association, the United States has the lowest HHI (that is, the least concentration) among wireless carriers of the 26 Organisation for Economic Co-operation and Development countries tracked by Merrill Lynch. Further, in the U.S., the top four carriers control only 86 percent of the market, yet in 23 of the 26 OECD countries, the top four carriers control 100 percent of the market. No U.S. carrier has a market share appreciably over 30 percent, which is well below the level of concern for anti-trust authorities.

There is also extremely healthy competition in the market for wireless handsets. InformationWeek reported U.S. handset market shares for the larger suppliers as of late 2008: 22.4 percent for Samsung, 21.1 percent for Motorola, 20.5 percent for LG, 10.2 percent for Research in Motion, 8.4 percent for Nokia, and 5.7 percent for Apple. CTIA reports that there are over 630 handsets sold in the United States, manufactured by 33 companies. These devices are sold by both carriers and a vast number of retailers, including "Big Box" and national electronics stores, independent retail outlets, manufacturers' stores and websites, and online auction sites. In nearly every case (Apple has only one handset to sell: the iPhone), handset manufacturers offer a variety of models, only a few of which are sold under exclusive distribution agreements. New products are hitting the market regularly, and prices for existing models are dropping. Additionally, in the past year, several on-line "applications stores" have launched, making over 40,000 applications suitable for wireless devices available to consumers. There is every reason to expect this cycle of innovation to continue to grow, as carrier networks evolve to support the new handsets and applications, and the latter develop to utilize the former.

This level of competition for both services and equipment has directly benefited wireless consumers as a whole. The price per minute of service in the United States is the lowest of the 26 OECD countries tracked by Merrill Lynch. From December 2006 to December 2007, the average number of minutes each subscriber used per month increased 7.7 percent and the average numbers of text and multimedia messages each subscriber sent each month doubled.

The evidence above clearly illustrates that the market for both wireless carriers and handsets in the U.S. is competitive and innovative, and is delivering consumer benefits. Yet rural carriers have painted a vastly more pessimistic picture of today's wireless marketplace, one in which the market is dominated by four large nationwide carriers with large enough subscriber bases to exert significant influence on handset manufacturers, such that no manufacturer can afford not to 'play ball' with the largest wireless carriers. The rural carriers do not claim that the handset markets are uncompetitive; rather they stretch to argue that consumers and smaller competitors are harmed by the actions of the "Big Four" carriers (AT&T Mobility, Verizon Wireless, Sprint Nextel, and T-Mobile) in accepting these exclusive deals because the effect is to deprive some consumers of either their desired handset, their desired carrier, or both.

But this overstates the market power of the carriers when it comes to desirable new handsets. First, as discussed previously, the FCC has found the wireless services market is subject to effective competition. Although the largest national carriers may be large, the level of concentration in these markets is below that which is typically of concern to the antitrust authorities. The RCA Petition alleges that the "Big Four" carriers today exercise "monopolistic" control over device manufacturers and use their market power to force manufacturers into exclusive relationships that harm the ability of rural carriers to compete. In the case of high-end handsets, the very opposite seems true: It appears now that it is the manufacturers who "command" the carriers, and the manufacturers are under no generalized "duty to deal" under our antitrust laws. Economists have long recognized the benefits of exclusive deals entered into by companies who lack substantial market power.

Even the RCA Petition acknowledges that "unique services and features" are a key element of competition among carriers. The FCC itself has noted that exclusive handset arrangements—*i.e.*, product differentiation—is a natural competitive response by carriers to the high customer "churn" rates they face. In other words, "churn" is the sign of a competitive marketplace and the exclusive arrangements are a simply feature of an intensely competitive market, rather than an "unfair" or "anticompetitive" tool.

Rural consumers are by no means bereft of attractive options for smartphones and other advanced handsets. There is less a "smartphone divide" than "lag" in the availability of certain models in certain regions of the country. Even if the leader-of-the-pack, the iPhone, remains available in the U.S. exclusively through AT&T for another year or two, there are already a wide variety of increasingly sophisticated alternatives to the iPhone, each of which also has a limited period of exclusivity with a single carrier. And the other large carriers have all announced plans to support "open" applications and handsets, with not one but *two* emerging open-source mobile platforms—Google's Android and Linux Mobile or "LiMo."

III. Calls for Exclusive Handset Prohibitions Overstate the Harms and Understate the Pro-Competitive Benefits

The typical exclusive handset agreement permits the product distributor, the wireless carrier, an exclusive right to distribute the product for some period of time. Exclusive handset arrangements benefit the manufacturer, the carrier and ultimately, the consumer. The deals typically include a guaranteed minimum order, which gives the carrier an incentive to heavily promote the product and offer subsidies to lower the price of the phone to consumers. Such arrangements can enable the research and development of more innovative—that is, riskier—handsets knowing that the carrier partner has greater incentive to promote and support the result. For manufacturers of smartphones such as the Apple iPhone, RIM Blackberry, and Palm Pre, securing a large base of users is especially important as it ensures that third-party developers will develop applications for the handset. As the number of third-party applications increases, the handsets are even more desirable. As Apple itself expressed it, "Your iPhone gets better with every new app."

Carriers are willing to pay for the right to be the sole retailer of a "hot" new handset in the belief that the handset will draw in new customers. The ability to lure subscribers with a handset that has created a "buzz" is a key element in operator differentiation, and differentiation is what permits companies to thrive in a competitive environment. AT&T improved its position with the iPhone and now Sprint is hoping to do the same with its exclusive introduction of the Palm Pre. For

smartphones, these new customers often also have higher bills because of increased data usage, resulting in even more revenue for the carrier. The net result is a competitive wireless services market that offers consumers a variety of devices, applications, service plans, and content associated with their wireless handsets.

Exclusivity is far from a rarity in the world of cell phones, and it is not a practice limited only to the largest carriers. Many carriers work closely with manufacturers to offer the specific package of features that they think will be most desirable to potential customers. For example, Cellular South's "Pic Sender" feature automatically delivers every picture taken with the built-in camera in a subscriber's cell phone to a specific e-mail account, a folder on the user's computer, or photo sharing websites. T-Mobile's Hotspot Calling feature allows certain of its WiFi-enabled phones to make unlimited calls from any WiFi hotspot and can seamlessly transition from WiFi to cellular networks. And as a startup with no customers, Jitterbug was able to work with Samsung to design and manufacture an exclusive handset designed specifically for the elderly, thus differentiating itself from other providers. Jitterbug is now a successful MVNO with 5 million subscribers. Helio (which was recently sold to Virgin Mobile), another small MVNO that never had more than 170,000 subscribers, worked with Pantech to develop one of 2007's most talked about phones, the Ocean.

There are many potential developers of innovative handsets, including both traditional manufacturers and new entrants such as Apple and Google. No single firm appears to have market power in the handset market, and certainly no single firm may be viewed as a sole source of innovation. The fact that small MVNOs can procure innovative "exclusive" handsets strongly suggests that there is no market failure to be addressed by regulatory intervention.

A. The iPhone is an Example of a Successful Exclusive Distribution Arrangement

Back in 2005, what we now know as the "iPhone" was just a concept, with no name, design plan or operating system, offered by a computer company with neither market share nor experience in wireless service or devices. This was a risky venture for both the equipment designer and the wireless carrier, one that has paid off handsomely. But the success of the iPhone follows the failure of Apple's first attempt to bring its iTunes music service to the mobile phone: the Motorola ROKR, launched in September 2005. The ROKR failed, in part, because Motorola insisted on loading the phone with its standard software. ROKR's failure to meet Apple's expectations caused the company to launch development of its own mobile phone product.

Part of the iPhone's success is because of features, such as Visual Voicemail, that were only possible through changes to the carrier's wireless network. Apple originally began negotiations with Verizon to be the exclusive carrier of its product, but Verizon was unwilling to meet Apple's demands, which also included limitations on the set of retailers for its handsets. Apple then turned to Cingular (now AT&T). AT&T was willing to cede control and take the risk of modifying its network and entering into an exclusive arrangement when the iPhone's market success was unknown. AT&T recognized that only by letting Apple take the lead on technological development could a truly revolutionary device be created. The resulting partnership allowed the two companies to make significant investments to develop a radically innovative device while ensuring that the phone and its new features would function properly on AT&T's network, thus guaranteeing the high-level user experience that Apple seeks for its devices.

In agreeing to be the exclusive provider of wireless service for this product, AT&T gave up the substantial sway that carriers normally had over how phones were developed and marketed for use on their wireless networks. Both carrier and equipment manufacturer took considerable risks, and contributed substantial assets toward product development. Nearly eighteen months and \$150 million in development costs later, the iPhone was born.

The iPhone was not only a revolutionary product in terms of design and features. The original business model struck between Apple and AT&T was revolutionary as well: It appears to be the first time a handset manufacturer was able to obtain a share of the monthly subscriber revenues generated by its product. When the follow-up "iPhone 3G" was launched in 2008, it was sold for \$199, less than half the price of the original. This dramatic price reduction reflected a change in the business model: AT&T agreed to pay Apple a subsidy of about \$300 per device, according to industry analysts, to help hold down the retail cost of the handset to consumers. Although this represented a reversion to the traditional business model of carrier subsidization of handsets, at \$199, the iPhone became far more affordable for the average wireless user and available to a vastly expanded customer demographic.

This continual cycle of technological innovation, aided by flexible business arrangements, has led to iPhone capacity increasing and prices dropping approximately \$500 in a 2-year period. Overall, this is an extremely consumer-friendly outcome, as it brings the iPhone, first released as a very high-end wireless phone and data product, within the reach of average wireless users. Regulation, with its inherent delays and disputes, simply cannot produce comparable consumer benefits.

B. The Harms of Exclusive Arrangements are Overstated

One might think that everyone would celebrate the iPhone as a breakthrough stimulus to innovation in the handset market as well as to the business relationships between carriers and equipment manufacturers. Yet, on May 20, 2008, the Rural Cellular Association (RCA) petitioned the FCC to investigate whether the agency should prohibit as anticompetitive the business model that helped bring the iPhone to fruition: an exclusive arrangement between the wireless carrier and the handset manufacturer. This is a profoundly backward-looking request, and I respectfully suggest that both the FCC and Congress decline the invitation.

RCA's Petition to the FCC casts the Nations' "Big Four" carriers variously as "monopolistic," "dominant," and "oligopsonistic" villains who use their market power to "command" exclusive arrangements like that between AT&T and Apple. The RCA Petition claims that its members are challenged in their ability to compete with the "Big Four" not only by their inability to access wireless handsets comparable in function and style to the high-end exclusive handsets, but by virtue of their inability to command the same volume discounts from vendors as the largest carriers, creating what RCA states is a "wireless marketplace bordering on oligopsony." The alleged "oligopsony" is a small group of carriers who, as handset *buyers*, supposedly exercise market power over handset *suppliers*. But the RCA Petition overlooks the fact that rival handset manufacturers offer many advanced handsets with features that are competitive with the most popular models sold under exclusive distribution arrangements, and that several of these models are available to and offered by RCA member companies, including the HTC "Touch" series of phones (offering touchscreen, Internet access, e-mail and music capability).

In addition to their alleged harms to smaller competitors, the RCA Petition claims that the exclusives create two distinct forms of consumer harm: (i) Consumers in "Big Four" service areas are forced to purchase service from a carrier they may not wish to use in order to utilize their handset of choice (which will cost more due to the lack of competition for distribution), and (ii) consumers in the foreclosed areas (those served by RCA members) are denied the opportunity to obtain service for the premium handsets they desire.

There is not yet—nor should there be—a governmentally-sanctioned right to obtain a particular handset (no matter how desirable that handset might be). Where both the handset manufacturer and the carrier service markets are effectively—if not robustly—competitive, the lack of availability of some equipment in certain parts of the country today should not give rise to an FCC rulemaking tomorrow.

RCA offers not a shred of evidence that the iPhone, for example, would cost less *but for* the exclusive distribution deal with AT&T. Nor would it seem likely that such a case could be made. There has been a steady decline in iPhone prices and the introduction of larger-capacity phones since its introduction 2 years ago. Nor do these arguments take into account that despite its initial premium (although falling) price, the iPhone has set record sales globally since its introduction. Again, this is the sign of a highly desirable product for which consumers are willing to pay a high price—in other words, the sign of a healthy marketplace, not one hobbled by anti-competitive activity.

Additionally, it is argued that exclusive arrangements are disproportionately harmful to rural consumers. An unstated premise of the rural carrier's request that exclusives be prohibited is that consumers in every area of the country have a legal or perhaps even constitutional right to the smartphone of their choice, and that any business arrangement that restricts the exercise of this right is, in essence, "contrary to the public interest." This is an extraordinary proposition, unsupported by fact, law, or reason.

Consumers today have an incredible array of wireless devices before them, and are by no means foreclosed from obtaining competitive wireless services by reason of the exclusive handset agreements. Moreover, the exclusive handset arrangements in the market today are for limited periods of time, and appear to be undergoing significant renegotiation by the principals as the market for these products evolves. Resolution of the thorny problem of the correct duration of an exclusive distribution arrangement is best left to freely negotiated contractual arrangements between the carrier and the equipment manufacturer.

RCA has argued that such arrangements harm rural consumers (and, of course, RCA's members) because only the largest wireless carriers are able to command these exclusive arrangements, leaving small rural wireless carriers and their customers without access to the most innovative handsets and services. According to RCA, the combination of Apple's exclusive U.S. deal with AT&T and the carrier's policy of barring its users from spending more than 40 percent of their time roaming off-network effectively renders the iPhone unavailable to subscribers in RCA member service territories.

The argument that these deals are driven by the market power of the four largest national wireless carriers, who use exclusive arrangements as a weapon against their competitors, including rural carriers, overlooks the fact that, if the iPhone is unavailable in certain rural areas, it is because AT&T *does not compete* as an originating carrier in that area. The sought-after prohibition on a wireless carrier's ability to enter into an exclusive handset distribution agreement with an equipment manufacturer would effectively regulate the equipment manufacturer's ability to conduct business in a profitable manner. It would interfere with the manufacturer's ability to freely contract the terms and conditions under which it sells its products, by imposing a back-door "duty to deal" with each and every wireless carrier. This would be both unprecedented and bad public policy.

C. The Benefits of Exclusive Handset Arrangements Are Increased Innovation and Competition

Now that the iPhone's success is established, why should other carriers that were initially unwilling to take the risk be able to share in the success? More importantly, if every wireless carrier had been able to sell the iPhone when it was initially released, it is unlikely that there would have been as much carrier support for developing competing products such as Google's G1, Research In Motion's touch screen Blackberry Storm, Samsung's Instinct, or Palm's Pre. And without those smartphones to compete with, Apple might have had little incentive to release the second-generation and now third-generation iPhones so quickly after the initial iPhone's release. For its part, Congress and the FCC should let the competitive forces of the wireless services and handset markets continue to produce devices like the iPhone unhindered by unnecessary government intervention.

Arguments that exclusive agreements doom rural customers to dwell forever on the wrong side of the so-called "Digital Divide" between urban/suburban residents with access to the hottest new smartphones and rural customers without ignores an even more important divide: that between the technologies of today and the disruptive innovations of tomorrow. If Congress or the FCC prohibits the exclusive partnerships between manufacturers and carriers that make it possible to master the technical challenge of device innovation *and* to finance such risky ventures, *all* Americans will miss out on the dramatic benefits of innovation and increased mobility of Internet access.

One must ask whether the iPhone or its competitor devices would have been developed as well and as quickly without such exclusive deals—and ask the same question about *future* devices. In other words, would banning such arrangements effectively spite *all* consumers by ensuring that, if some customers can't have the fruits of device innovation immediately, then none should?

While some carriers had reached exclusive arrangements prior to the 2005 Apple/Cingular iPhone deal, most of those deals concerned MVNOs, whose business model as resellers required that distinguish themselves from the underlying carriers whose services they resold by offering unique devices and service features. These early exclusive equipment arrangements largely failed in the marketplace. But today other smartphone manufacturers are following Apple's lead and demanding exclusive deals with sharing of revenue from resulting customer wireless data service plans rather than the traditional model of simply try to sell as many units as possible. This practice makes sense—the attractive new devices can attract huge numbers of new customers to a carrier—with each new customer paying for data as well as voice service. In an industry with high fixed costs and low marginal costs, this translates into large potential profits for a carrier with an attractive new device.

This dynamic can incentivize a new entrant like Apple to fund expensive, risky efforts to develop revolutionary wireless handset products like the iPhone. Handset innovation, in turn, can spur carriers to upgrade their infrastructure to accommodate the increased bandwidth demands sophisticated handsets place on their wireless networks. Each side of the business transaction gains, but more importantly, so do consumers in terms of gaining innovative handset features, data applications, and wireless service offerings.

The phenomenal success of the iPhone has galvanized other equipment manufacturers and carriers to enter into similar exclusive arrangements to develop their

own innovative, competing products. The introduction of the iPhone was followed by a flood of other innovative handsets under exclusive distribution agreements. These include, in addition to the handset options discussed above, LG's Voyager (offered exclusively by Verizon Wireless), Samsung's Ace and Instinct (offered exclusively by Sprint Nextel), Samsung's Katalyst (offered exclusively by T-Mobile), and the RIM Blackberry Storm (offered exclusively by Verizon Wireless). Several of these handsets have features the iPhone lacks, such as the Bold's higher resolution and the Instinct's tactile feedback. Similarly, Google has teamed up with HTC to offer a "G1" smartphone exclusively through T-Mobile. The G1 makes use of Android, Google's new operating system, and also offers features not available with the iPhone. Many, if not most, of these products are direct competitive responses to the challenge posed by AT&T and the iPhone; their development has brought additional feature-rich options to consumers.

The most recent entrant to this burgeoning field is the "Palm Pre," touted as a "respectable competitor" to Apple's increasingly popular device, which for a limited time, will be exclusively sold by Sprint Nextel, a carrier that has been struggling with customer losses over the past few years and is looking for a way to stop subscriber losses and win back market share. The device is being marketed at \$299 before a \$100 rebate for new or renewing Sprint data plan customers.

It is likely not coincidental that Apple announced its new lower \$100 pricing for last year's iPhone 3G at about the same time the Pre hit the market. Just days later, AT&T itself took out advertisements promoting its exclusive Blackberry Bold smartphone for \$199 after mail-in rebate of \$100. In addition, there are recent signs that some carriers are dropping, and others considering dropping, the cost of their monthly data service plans supporting these smartphones to further drive penetration. These are signs of a well-functioning marketplace: one competitor breaks ahead of the pack with a unique offering, others race to catch up, new products and services are introduced, prices drop, and consumers benefit.

Product development, like business arrangements, in the fast-moving technology sector can be a hit or miss endeavor. For every successful product like the iPhone, there are tens if not hundreds of commercial failures. It would be unfair to require carriers and manufacturers to share the rewards of only their successes, while bearing sole responsibility for their product failures.

IV. Competition Should be Protected, not Competitors

It is the competitive process, rather than individual competitors, that competition policy seeks to protect in light of the benefits competition brings to consumers in the form of lower prices, greater innovation and better service quality. It is well recognized that the wireless market is reaching saturation: that is, most all of the people who want mobile phones likely have them already. Subscriber growth for the carriers must come from attracting new customers away from the competition. Handset differentiation is a key means of drawing such customers, and handset exclusivity is a key marketing tool. Prohibiting such arrangements and effectively mandating that all offerings look the same would interrupt a well-functioning competitive process and leave the carriers with fewer options to attract customers. Although this undeniably leaves some carriers out of the competition for customers desiring a particular smartphone, it does not completely foreclose their ability to compete on other service features and functions.

One of the enduring lessons of childhood is that you should share your toys. But in the realm of electronic communications networks, this rule of thumb does not always have beneficial consequences. In a 1999 U.S. Supreme Court decision overturning portions of the FCC's unbundled network element sharing rules, *AT&T v. Iowa Utilities Board*, concurring Justice Stephen Breyer observed:

Nor can one guarantee that firms will undertake the investment necessary to produce complex technological innovations knowing that any competitive advantage derived from those innovations will be dissipated by the sharing requirement . . . Increased sharing by itself does not automatically mean increased competition. It is in the unshared, not in the shared, portions of the enterprise that meaningful competition would likely emerge.

A totally unbundled world—a world in which competitors share every part of an incumbent's existing system, including say, billing, advertising, sales staff, and workforce (and in which regulators set all unbundling charges)—is a world in which competitors would have little, if anything, to compete about.

Substitute mandatory "sharing" of handsets developed through equipment manufacturer-carrier collaboration and shared risk taking for "advertising" and one can see the net effect of a prohibition on exclusive handset arrangements: there will be little left for the carriers to compete about. In networked industries like wireless,

with high fixed costs, if all other areas of competition are removed, forcing the firms to compete on price alone will make recovery of network investment more difficult and eventually could lead to one or more of the current providers exiting the market. In other words, it would likely lessen, rather than enhance, competition and consumer welfare.

V. Existing FCC Policy and Rules Correctly Permit Exclusive Handset Arrangements

Well established FCC precedent supports exclusive handset arrangements, based on the highly competitive nature of the telephone consumer equipment market and the effectively competitive services market. In the 1968 *Carterfone* decision, the Commission first required that any piece of “customer premise equipment” be allowed to access the telephone network (then truly a monopoly) so long as it did not cause harm to the network. In the FCC’s landmark 1980 *Computer II* decision, the agency “de-tariffed”—removed from common carrier regulatory controls—customer premises equipment (CPE) as well as data transmission services, but required that both be sold unbundled from the underlying common carrier wireline service and by separate corporate entities. The FCC did so in recognition of the fact that the CPE market was highly competitive such that the imposition of common carrier regulation had serious and deleterious consequences. In 1992, the Commission created an exception to the bundling prohibition in its *Cellular CPE Bundling Order*, allowing wireless providers to bundle devices and transmission services with wireless voice service. The Commission justified this exception on the grounds that “most wireless carriers were smaller and operated in local markets, making it unlikely that they could ‘possess market power that could impact the numerous CPE manufacturers operating on a national . . . basis.’”

In the same 1992 order, and at a time when there were only *two* cellular carriers per market, the FCC rejected claims by both cellular resellers and equipment manufacturers that permitting carriers to enter into exclusive agreements with CPE providers created the potential for anticompetitive abuse. Two markets were analyzed: the CPE market and the cellular services market. The FCC had little trouble concluding that the “cellular CPE market is extremely competitive.” After noting that the record was not conclusive as to whether the service market was “fully competitive,” the FCC reiterated that in establishing the duopoly cellular market, it had concluded that “even a marginal amount of facilities-based competition will foster public benefits of diversity of technology, service and price.” Accordingly, the FCC refrained from intervening in these markets where the record before it was devoid of evidence that cellular carriers were violating their obligations to provide service to customers purchasing other brands of CPE or that the exclusives were having an anticompetitive impact on competition in the CPE market.

Not only did the FCC find that no evidence of anticompetitive effects from the exclusive CPE deals had been presented on the record before it, but the agency went on to note that the record did not demonstrate a reason to be concerned about future exclusive dealing arrangements, because nondiscrimination requirements (still in effect today) precluded cellular carriers from refusing to provide services to a customer on the basis of the CPE he or she owns and it was unlikely that cellular carriers could effectively eliminate competition in the CPE market by entering into such agreements. In other words, the two markets potentially affected by exclusives—the upstream CPE market and the downstream carrier services market—were both sufficiently competitive even in 1992 to withstand any potential adverse effects from exclusive deals. Certainly today’s exclusive deals pose no greater threat in wireless markets served by many more carriers offering a far greater variety of handset options.

VI. Any Prohibition on Handset Exclusivity Would Be Difficult to Implement

If Congress wished to impose a prohibition on exclusivity, it would have to address the question of what should be considered an “exclusive?” As explained above, many carriers offer nearly identical handsets with the only differences being the software. In some cases, carriers offer handsets in exclusive colors, or with the camera removed.

Similarly, because there are multiple wireless standards in the United States, a phone designed for GSM networks simply will not work on CD MA networks without significant product redesign. For voice, there is also Sprint’s iDEN network, and for data there are multiple technologies for both of the two major network types. In the case of the iPhone, AT&T currently has a technological basis for its exclusive distribution arrangement. It is the only major U.S. carrier with a 3G network utilizing the HSPA standard on the 850 MHz band, and the iPhone as currently con-

figured only supports AT&T's service for full data functionality. Even if carriers were prohibited from entering into exclusive arrangements, manufacturers can easily obtain de facto exclusives by designing phones for only one carrier's network. Adapting the phone to the spectrum interface technologies utilized by other carriers would most likely require adding other spectrum bands and/or overhauling the device to utilize CDMA calling and 3G access utilizing standards other than HSPA. Forcing manufacturers to design phones for multiple carriers is more likely to destroy innovation than to increase consumer welfare.

Eventually, as carriers transition their networks to a common 4G standard, some of these differentiating factors will disappear. But even if exclusive handset arrangements were prohibited tomorrow, it would not be possible for all carriers to immediately offer the iPhone or similar handsets on their network. Thus, little good would be accomplished but tomorrow's innovations would be put at risk.

Even setting limits on the terms for exclusive arrangements, while less disruptive than an outright prohibition, would entail difficult decisions over exactly what the permissible period of exclusivity should be. Last December, France's Competition Council struck down Apple's five-year exclusive iPhone distribution agreement with Orange (formerly known as France Telecom). The decision was partly reflective of the authority's concern that the French mobile phone market was less competitive than others, such that a five-year exclusive sales agreement was far too long. The ruling specified that all existing and future sales agreements between Apple and Orange must expire after a maximum of 3 months, which the carrier argues will not allow it to justify the investments needed to upgrade its network to support mobile Internet services. If 5 years is too long, and 3 months too short, would Congress or the FCC be able to set a single time limit on exclusivity that will fairly balance the equities for all wireless providers and all equipment manufacturers?

Finally, an economic assessment prepared for one of the larger rural carriers seeking an FCC rulemaking to limit use of exclusive handset arrangements suggests that any exclusive sales arrangement made by a "Big Four" carrier and an equipment manufacturer be limited to apply the handset exclusivity only to the other "Big Four" carriers, leaving smaller carriers free to obtain those handsets. Even assuming there were a competitive basis for such a restriction (which is doubtful), while it may be clear enough which carriers should be so restricted in their ability to contract for equipment today, it is by no means clear what the appropriate test should be in the future, or even how such a rule could be written into the Code of Federal Regulations.

VII. Alternatives Exist for Rural Carriers Seeking Access to Innovative Handsets

Rather than trying to prohibit or limit the use of exclusive handset arrangements, the rural carriers may wish to pick up where the ACG members left off, pool their resources, and negotiate such arrangements for themselves. Like AT&T, the rural carriers may have to be willing to share some subscriber revenue or increase their handset subsidies to bring prices on advanced units down sufficiently to increase the addressable market for such products, but that's simply the market at work.

There is nothing stopping smaller carriers from banding together to achieve economies of scale. Indeed, many have already done so. The Associated Carrier Group (ACG), a consortium of 25 small or rural Tier II and II CDMA carriers "was formed to benefit both its members and the consumer by facilitating efficient production and marketing of devices as well as increased competition. The consortium enables its members to work with manufacturers, suppliers and other vendors to develop and procure products in a more timely fashion through economies of scale and standardization of coding and other features." Proceeding in this manner, the ACG members actually beat Apple and Cingular's Motorola ROKR to market in 2005 with a digital music player smartphone, the Kyocera Slider Remix KX5 music phone. At the time, ACG's president proudly declared: "Although other phones have been launched with MP3 capability, we think this was the first phone to be centered around music. Shortly thereafter, other carriers launched music-centric devices," adding, "This phone is exclusive to us for a limited time."

More recently, ACG has partnered with Brightpoint, Inc. which supplied approximately 84 million wireless devices globally in 2008. Similarly, twenty eight small carriers that won licenses in the FCC's recent 700 MHz auction formed NextGen Mobile, LLC. An official of the new company explained that, "By aggregating our orders, NextGen Mobile hopes to entice device manufacturers to develop and deliver the next 'it' handset or data card to those customers shut out in the past."

The fact that these small carriers and MVNOs can procure innovative "exclusive" handsets indicates that other smaller carriers can as well and strongly suggests that there is no market failure to be addressed by regulatory intervention. As no single

carrier and no single manufacturer has a position of market power, exclusive arrangements should pose no antitrust concern.

Yet another avenue is negotiating with the carriers who currently have exclusive distribution arrangements for desired handsets. There are indications that at least one rural cellular carrier, Cellular South, through the ACG, is in discussions with Verizon Wireless to secure access to handsets currently exclusive to Verizon Wireless from two manufacturers, 6 months after their introduction by Verizon Wireless. Such negotiated contractual resolutions to the problems alleged by rural cellular interests are surely far superior to resolution through government intervention.

VIII. Conclusion

RCA has asked the FCC to initiate a rulemaking proceeding to investigate alleged anticompetitive effects of exclusivity arrangements between commercial wireless carriers and handset manufacturers, and to adopt such rules, as necessary, to prohibit such arrangements as contrary to the public interest. But the allegations supporting this request amount to little more than complaints that lack of access to the most popular new smartphones such as the iPhone and Blackberry Storm make it more difficult for rural carriers to compete with the largest national carriers. But the FCC and Congress should refrain from interfering with these beneficial contractual arrangements freely negotiated by equipment manufacturers and wireless carriers in a competitive marketplace.

These exclusive handset arrangements do not preclude competition on other wireless service attributes any more than they preclude the smaller carriers from joining together to strike their own deals for exclusive handsets with equipment manufacturers. The situation is not analogous, for example, to that of an exclusive contract to serve multiple-dwelling unit for multichannel video programming services where the existence of the contract completely precludes marketing a competing service to the residents. Rather, it is more closely analogous to network sharing requirements for unbundled elements, where the accepted standard is whether access to the desired element is *necessary* in that lack of access would *impair* the ability of a competitor to enter the market. Mere difficulty is not impairment, and sharing of competitive assets should not be ordered lightly. A prohibition on exclusive handset arrangements would have the net effect on equipment manufacturers and carriers of a sharing obligation. Such an action is neither necessary nor advisable in today's wireless marketplace. But if I am incorrect in my views on the competitive situation or harms to consumers posed by these arrangements, there would be nothing to prevent our antitrust authorities from intervening under either the antitrust laws or consumer protection statutes.

I respectfully submit that neither Congress nor the Commission should take such action on the matter of exclusive handsets. The FCC today has before it a record on this question. If further study of the matter is deemed advisable, the FCC is well within its powers to conduct a Notice of Inquiry and gather a more fulsome record from additional parties. I am confident that at the end of such an inquiry, the Commission would determine that there is no need for additional regulatory intervention.

Mr. Chairman, thank you again for the invitation to testify today. I would welcome any questions the Committee may have.

Senator KERRY. Thank you, Ms. Esbin, very much.
Mr. Meena?

STATEMENT OF VICTOR H. "HU" MEENA, PRESIDENT AND CEO, CELLULAR SOUTH, INC.

Mr. MEENA. Good afternoon, Mr. Chairman, and members of the Committee. My name is Hu Meena, I'm President and CEO of Cellular South. Thank you for this opportunity to testify today on behalf of Cellular South, our customers and consumers everywhere who want more choices when it comes to their wireless plans and devices.

Wireless has experienced a golden age and offers the opportunity to engage with the world as never before. We see this golden age coming to an end, as the largest wireless carriers engage in anti-competitive and anti-consumer practices—practices, such as exclusivity agreements with wireless device manufacturers.

Today, AT&T and Verizon Wireless have over 60 percent of the national wireless market share and roughly 90 percent of the wireless market is in the hands of those two plus Sprint and T-Mobile. Instead of fostering innovation and offering consumers the best range of choices, the largest companies are using their power to demand and to receive long-term exclusive agreements with device manufacturers.

These long-term agreements essentially put the best, most powerful, and most popular cell phones, smartphones, and other wireless devices out of the reach of millions of consumers.

If you live in New York City and want a touch screen Blackberry Storm, then you will be a Verizon Wireless customer whether you want to be or not. If you live in Washington, D.C. and want an iPhone, then you are obligated to be an AT&T Wireless subscriber, even if they do not cover your metro route. If you live in Laurel, Mississippi and want to subscribe to a 3G network, you will be limited to only devices that Cellular South is allowed to offer.

Of course the Nation's largest carriers aren't limiting the use of exclusive arrangements to wireless handsets, these carriers have already begun using exclusive arrangements in the Netbook market. I hold one here. The device is smaller than a laptop and a little larger than a PDA.

Will Congress sit by and allow the largest carriers to lock the most attractive Netbooks into exclusivity agreements before this segment of market is fully—fully emerges? Left unchecked in this segment of the PC market, the largest wireless carriers will gain control and begin to restrict PC innovation and distribution, just as they have wireless handsets.

Furthermore, the claim that exclusivity agreements drive innovation is completely unfounded in this segment of the market. Companies like Dell, Acer, and others were advancing the Netbook market well before the largest carriers got involved. How then can the largest carriers claim a divine right to exclusivity on Netbooks?

The situation with exclusivity is bad and only getting worse. Cellular South and carriers like us have tried to find solutions to this problem without resorting to help from policymakers. We've attempted several solutions with industry, including fruitless direct talks with the large carriers and indirect talks via CTIA. We have tried to entice device manufacturers to sell us the latest technologies by forming a buying group and consolidating the purchasing power of 27 regional carriers, but we have not been able to capture their attention—the manufacturer's attention, as they consistently look over their shoulders for approval from the largest carriers of what they might be allowed to sell to us.

The big wireless carriers argue that device manufacturers can not innovate and offer new devices without the help of funding generated by exclusivity agreements. Yet, long before the Razor, before the iPhone or the Storm existed, consumer electronics manufacturers had established an almost 30-year record of innovation. And European and Asian consumers enjoy a broad choice of innovative devices, 70 to 80 percent of which are available independent of any network operator.

In short, what we are witnessing is a strategy by the largest carriers to limit consumer choice and undermine competition. Our vi-

sion is to allow all consumers in the U.S. to freely choose their own combination of attractive devices, relevant applications, quality coverage, access to high-speed broadband networks, all with a rate plan that best fits their needs and their budget. Now, that's true innovation.

I hope that our vision is the one that policymakers will embrace, before consumers find themselves in a wireless dead zone of limited choice.

Thank you for your time today.

[The prepared statement of Mr. Meena follows:]

PREPARED STATEMENT OF VICTOR H. "HU" MEENA,
PRESIDENT AND CEO, CELLULAR SOUTH, INC.

Introduction

Mr. Chairman and members of the Committee, thank you for allowing this opportunity to testify before you today regarding a number of important issues related to competition in the wireless industry. I have been in the wireless industry for over twenty (20) years with Cellular South, the Nation's largest privately-owned wireless carrier, serving all of Mississippi and portions of four other southeastern states.

In my years in the wireless industry, I have seen the duopolistic world of the early cellular licenses, the rise in wireless competition as a result of spectrum auctions in the personal communications service, and the growth and innovation throughout the industry as a result of the Telecommunications Act of 1996. However as I sit before you today, I am convinced that, unless things change quickly, the industry is coming full-circle and progressing—or, rather, regressing—into a duopoly once again.

The Justice Department broke up the AT&T monopoly in 1982. In 1993, the wheels were set in motion for spectrum auctions that would open the duopoly in wireless markets to competition. In 1996, Congress rewrote the Telecommunications Act to further promote competition in telecommunications services. Today, however, the industry is trending back toward consolidation and the days of Ma Bell. The largest carriers continue with acquisition after acquisition—Centennial Wireless, Alltel, Rural Cellular Corporation, Midwest Wireless, SunCom, Dobson Communications, just to name a few—with seemingly no interest from regulators in the effects that this consolidation has on the market.

Today over ninety percent (90%) of the wireless market is in the hands of AT&T Wireless, Verizon Wireless, Sprint Nextel and T-Mobile.¹ Combined, AT&T Wireless and Verizon Wireless control over sixty percent (60 percent) of the market.² This should come as no surprise after the parade of acquisitions over the past several years.

One reason that this is a problem is that the largest carriers use their market power to prevent competitors from having access to devices and roaming. If this trend continues, and I believe it will without intervention from Congress, then there will once again be a duopoly in the wireless industry. Our country's banking and finance policy mistakenly believed that free reign in the marketplace with little oversight was the best course of action and that certain institutions were simply too big to fail. This reasoning will lead to the same market failures in the wireless industry. Congress must take action now to ensure that the wireless industry remains the competitive and innovative marketplace that Congress intended for consumers to have.

¹ According to a series of SEC filings and/or corporate press releases all of which are publicly available, customer totals of the four largest carriers as of 3/31/09 were: Verizon Wireless—86.6 million customers, AT&T—78.232 million customers, Sprint—49.083 million customers, and T-Mobile—33.2 million customers. Total customers served by "Big Four"—247,115,000. According to CTIA—The Wireless Association, there were 270.3 million wireless customers as of 12/31/08. Even if one makes the unlikely assumption that wireless growth continued at the same rate in the first quarter of 2009 as it did in 2008, the total number of wireless subscribers rises to only 274,025,000. These numbers yield a combined market share of 90.179 percent for the Big Four. Of course, this does not include the addition of Centennial's customer figures to AT&T's customer count once that acquisition is approved by the FCC.

² See explanation in FN 1.

I. Exclusive Agreements for Devices

One effect of the market concentration described above is that the largest carriers now use their device market power to demand (and receive) long-term exclusive agreements with device manufacturers for the latest and greatest handsets. Exclusivity agreements prevent other carriers from acquiring these devices and are particularly harmful to wireless consumers.

A. Exclusive Agreements for Devices are Anti-Competitive

Wireless service has evolved from a market where consumers were primarily concerned with attractive monthly plans and a provider's network, to a market where a carrier's wireless devices reign supreme. Cellular South and other regional and rural carriers have competed with the largest carriers for years based on network quality, network coverage and price. These are all factors that are within our control. If we lose a customer because we don't offer the right plan or because we drop too many calls, that blame falls squarely on our shoulders—and I can and will fix that problem. However, our ability to compete is compromised because the largest carriers lock up devices in exclusivity agreements. Put simply, regional and rural carriers cannot gain access to the latest, cutting-edge devices which gives large carriers a key competitive advantage. Focus groups of customers who have left Cellular South for the largest carriers repeatedly say that they are buying the device, not the network, and certainly not the company.

Historically, exclusive agreements lasted three (3), maybe even six (6), months. Agreements of this length were certainly obstacles to competition, but they were not the anti-competitive weapons that today's long-term agreements have become. Today, handset manufacturers tell us that the largest carriers are demanding exclusivity on more devices, as well as longer exclusive periods for devices. The largest carriers are increasingly demanding "lifetime" exclusives on handsets. At least one large carrier is demanding that all of the devices it accepts from a particular manufacturer be provided under exclusive agreements. For years, Sprint has had exclusive agreements for all of Sanyo's devices.³ Manufacturers know that they must cater to the largest carriers in order to secure any kind of market share in the U.S. market.

B. Exclusive Agreements for Devices are Anti-Consumer

This battle among the industry titans has left consumers as collateral damage because device manufacturers are prohibited from providing the cutting-edge devices that consumers desire to the smaller carriers. Vast portions of America—including all or part of Alaska, Arizona, California, Idaho, Kansas, Maine, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Mexico, Oregon, Vermont, Washington, West Virginia and Wisconsin—are not served by any of the largest carriers, so Americans in these areas are prohibited from acquiring the newest and most innovative devices. Even in areas that are served by one of the largest carriers, consumers are not free to choose the latest devices without being forced into accepting service from a particular carrier. If you live in New York City and want a BlackBerry Storm, then you will be a Verizon Wireless customer whether you want to pay confusing add on fees or not. If you live in Washington, D.C. and want an iPhone, then you are obligated to be an AT&T customer even though it will be years before you can reliably use your iPhone when traveling to and from work on the Metro. Because exclusive agreements prevent Cellular South from getting these devices, if you live in Laurel, Mississippi and want to subscribe to a third generation ("3G") network, you will be limited to only those devices that Cellular South can provide.

Of course, the Nation's largest carriers aren't limiting their use of exclusive arrangements to wireless handsets; these carriers have already begun using exclusive arrangements in the Netbook market. Netbooks are devices that fit somewhere between a Smartphone and a laptop computer. These devices offer Internet access and common laptop functionality, but are priced at a level at or near most Smartphones. These devices will offer the perfect solution for a number of wireless users who find Smartphones too small for extensive use, but find a laptop to be too cumbersome. Cellular South has been in touch with several Netbook manufacturers and, as you may have guessed, the largest carriers are already demanding exclusivity on many models of these wireless devices.

What would happen if merchants sold computers that only worked with one Internet service provider? Imagine a world in which Macintosh computers only worked on AT&T's DSL. That's exactly the world we live in with the iPhone and Apple's exclusivity agreement with AT&T. If you want that handheld computer, you must have service through a particular wireless voice and Internet provider.

³This has continued even though Sanyo is now owned by Kyocera.

As another example, what would happen if a pharmaceutical company developed a lifesaving drug that could be purchased exclusively from one pharmacy chain in the country, but you didn't have a branch of that chain in your city? That is similar to what consumers experience without access to some of the latest devices. Potentially lifesaving applications are being developed for devices that are exclusive to a single carrier. If that carrier does not serve your area, then you are simply out of luck.

I was asked about this at a recent hearing in the House of Representatives. Unfortunately, the question was presented as if we were seeking a free ride off of the investments of AT&T and Verizon. Holding aside that it is far from clear that those carriers take any real risk in developing handsets, we are simply seeking to buy the products that handset manufacturers produce and sell to others. Our conduct in seeking to limit or ban exclusivity arrangements is intended to broaden the market for handsets. We do not seek any special treatment or discounts, only an opportunity to buy the products they make.

C. Impact on Consumers, Economic Development, Public Safety and Health Care

If a regional or small carrier cannot get access to the latest devices, then it cannot roll out next-generation services. No carrier can justify the expense of deploying a new technology unless it can also deliver the devices necessary to make that technology work and deliver the products and services that consumers want. While this is bad for the carrier, it is ultimately the consumer who pays the price for not having access to the devices necessary to use mobile broadband services. Without access to the latest devices, consumers are ill-equipped to respond to natural disasters, they cannot access many benefits of telemedicine applications, and they cannot adequately protect themselves in emergency situations. Today's advances in wireless technology will not be realized until the latest wireless handsets are available to all of rural America.

Collectively, a lack of access to the latest devices means that rural communities cannot maximize economic development. One of the first questions Toyota asked when it considered whether to build a plant in Mississippi was whether the rural town of Blue Springs had access to wireless 3G technology. Thankfully, for Blue Springs and the surrounding area that answer was "yes." However, without access to modern wireless devices, large portions of America will be left behind as the industry continues to deploy third generation or 3G technologies and eventually deploys 4G technology. Yesterday's economic development infrastructure meant rail, electrical, and road access. Today's global economy demands that rural areas have access to wireless broadband and the latest wireless devices.

D. The False Dilemma: Keep Exclusivity Agreements or Lose Innovation

The largest carriers claim that handset exclusivity agreements are good for consumers and the industry because they promote innovation. According to this argument, without exclusivity agreements, there would be no innovation in the wireless device market. The largest carriers offer a false dilemma between banning exclusivity agreements and innovation.

If this tactic sounds familiar, it is because the argument is simply today's version of the doomsday scenario that legacy companies ask us to believe whenever their control is threatened. Years ago, we were warned that using non-AT&T owned equipment could cause harm to the landline network. When the Federal Government finally permitted Americans to use non-AT&T equipment, the network miraculously survived. Had AT&T prevailed in those days, the people that continue to have landline telephones may still be using rented, black, bulky boxes that are connected to the wall and useful only for voice connections.

Not only did the landline network survive when consumers were allowed to purchase and use non-AT&T equipment, incredible innovation sprang forth and the network became more than just a tool for voice communication. Today, the old landline network is used for high-speed data connections between computers (albeit they are limited to location-to-location connectivity). No one could argue that the computer industry has lacked innovation, yet the service providers do not have exclusive agreements for the customer equipment. Since today's wireless devices are far more akin to computers than merely voice telephones, how does the myth of exclusivity driving innovation continue to persist?

1. iPhone

While it is important to understand that the handset exclusivity issue is about far more than one device, the fact remains that Apple's iPhone crystallized the problem for consumers. Although AT&T touts this device as "creating enormous benefits

for *all* consumers”⁴ the fact remains that millions of Americans *do not* benefit from the iPhone due to the limited scope of AT&T’s network and its poor coverage in many areas.

According to AT&T, those customers who do benefit from the iPhone do so “in no small part” as a result of “[t]he exclusive arrangement between AT&T and Apple” that delivers “spectacular public interest benefits.”⁵ Although AT&T claims “close collaboration and enormous investment,”⁶ the level and timing of AT&T’s collaboration has never been disclosed and it is widely assumed that much, if not all, of AT&T’s investment was attributable to long-overdue network upgrades.⁷

With the release of the latest iPhone 3GS, AT&T continues to impede innovation by ensuring that Multimedia Messaging Service (MMS) will not be supported on AT&T’s network until sometime this fall and that tethering⁸ will not be available until some undisclosed time in the future.⁹ This is hardly an example of a carrier driving innovation.

2. Netbooks

As discussed above, Netbooks are the next emerging wireless market segment with the opportunity to change the way people look at their wireless device. Netbooks combine the functionality of a personal computer with greater portability than a laptop, and they approach price points comparable to many Smartphones on the market today. Netbooks represent a solution for businesspeople, students, travelers, and anyone else that values full connectivity in a compact yet functional device. This product offers an economical entry point for demographics that have been left on the wrong side of the “digital divide.”

Well-known computer manufacturers such as Dell are already in the Netbook market but, predictably, the largest carriers are now demanding exclusivity agreements simply because manufacturers of Netbooks have embedded wireless data cards—in addition to embedded Wi-Fi cards—to allow them to connect to the Internet. The largest carriers have not driven innovation in this market, yet they are able to extract exclusivity agreements—once again—because they have the market power to demand them. In the case of the most economical Netbooks on the market, Acer’s devices, we have been told by that manufacturer that all of their Netbooks are under exclusivity agreements. These agreements effectively deny Netbooks to any American who could meet an entry-level price point but who does not live in the proper service area, or who wishes to connect the device to their carrier of choice.

3. True Innovation

Our vision is to end big-carrier practices that prohibit every wireless consumer in the United States from being able to freely choose their own combination of attractive devices, relevant applications, quality coverage, and access to high-speed broadband networks, all with a rate plan that meets their budget. Now that’s true innovation! As long as handset exclusivity agreements are allowed to exist, this vision for innovation will never be reached.

E. Attempts at Non-Governmental Solutions

The situation with exclusivity agreements is bad and is only getting worse. Without action from Washington, there will be no solution. Cellular South and carriers like us have tried to find solutions to this problem without resorting to help from policymakers. We have attempted several solutions within the industry, but all have been fruitless insofar as resolving this problem.

⁴See the late-filed Written Statement of AT&T, Inc. before U.S. House of Representatives, Subcommittee on Communications, Technology and the Internet at 7 (no filing date given; May 7, 2009 hearing date) (emphasis added).

⁵*Id.*

⁶*Id.*

⁷While early reviews of the iPhone were positive, the complaints about AT&T’s slow network were too numerous to count. A quick Google search with the terms “AT&T slow network iPhone” returns 156,000 results.

⁸“Tethering” is the capability to use the handset as a wireless modem by connecting it to a computer with a cord, so that the computer can access the Internet. This is especially useful in areas beyond the reach of wireline broadband connections and Wi-Fi networks.

⁹“AT&T Lagging Behind in iPhone 3G Feature Deployment” available at: <http://www.neowin.net/news/main/09/06/09/att-lagging-behind-in-iphone-3g-feature-deployment> (last visited June 14, 2009) (“Because of carrier exclusivity agreements it’s the end user who gets harmed because they do not have the option of using a phone of their choosing on the network they prefer. All operators are guilty of exclusivity agreements, AT&T with the iPhone, Verizon with the Blackberry Storm, Sprint with the Pre and T-Mobile with the G1. Hopefully 1 day soon these contracts will be outlawed in favor of consumer choice, but until then, everyone must play the cards that have been dealt.”).

1. Direct Contact with Large Carriers

Cellular South, in conjunction with another regional carrier, had discussions with Verizon Wireless regarding the possibility of Verizon lifting its exclusivity agreements for regional and rural carriers. There was an initial oral agreement that would allow Associated Carrier Group (ACG) members and certain other regional and rural carriers to offer a limited number of Verizon's exclusive handsets from two manufacturers—LG and Samsung—six (6) months after Verizon launched the devices. It was understood and agreed to by Verizon and ACG that this would require access to the devices prior to Verizon's launch so that other carriers could begin optimizing and testing the devices, which is generally a nine (9) to twelve (12) month process. As a condition of this agreement, Verizon would determine which carriers would be allowed to be a part of the ACG buying group. ACG was willing to accept these terms because it represented a step in the right direction.

Prior to the hearing on May 7 before the House Subcommittee on Communications, Technology and the Internet, Verizon advised ACG that it would not, in fact, allow the smaller carriers to have access to the devices or to work with manufacturers prior to Verizon's launch. This change had the potential to double the exclusivity period and thus terminated the deal. Without access to the devices in advance of Verizon's launch, ACG members and the other smaller carriers could not offer these devices for approximately nine (9) to twelve (12) months after Verizon's introduction. By this point, the devices are at or nearing the end of their life cycle and certainly are no longer the cutting-edge devices that consumers demand.

Cellular South and other ACG members have been, and still remain, opposed to exclusivity agreements for any period of time. Verizon's actions clearly demonstrate the need for Congress to resolve this issue for consumers and competitors.

2. Device Manufacturers

Our efforts with the equipment manufacturers have produced information, but no solution to the problem of exclusive agreements for devices. Manufacturers tell us that they would like to open their portfolios to us, but that they cannot show us a number of their devices—much less sell them to us—because the largest carriers will not allow it.

3. Industry Groups

The Cellular Telecommunications and Internet Association ("CTIA") convened a working group late last year in an effort to resolve the device exclusivity issue. CTIA brought large and small carriers to the table along with manufacturers, and the effort began with an early hope of promise. However, over the course of approximately 3 months, it became apparent that the largest carriers had no incentive to participate, the manufacturers remained virtually silent on the matter, and the effort proved futile.

4. Consolidation of Purchase Power

One frequent response from the four carriers that profit from exclusive handset arrangements is the suggestion that smaller carriers should consolidate purchasing power in order to gain access to cutting-edge devices. While that idea is good in theory, it does not work in practice.

The Associated Carrier Group was formed a number of years ago for just this purpose. ACG has almost 30 carriers who, at this time, are exclusively CDMA service providers. For the past 2 years, representatives of ACG have traveled to South Korea to plead for access to cutting-edge devices from LG and Samsung, but South Korean manufacturers have made it clear that exclusive arrangements insisted upon by the Nation's largest carriers prevent them from selling the most appealing handsets to ACG members.

It is commonly suggested that ACG should push for its own exclusive devices. Although ACG did have a device several years ago that was not sold by another carrier, the suggestion that small carriers join together for their own exclusive device ignores our belief that exclusives are not good for consumers or the industry. It is not our position that exclusives are bad because we don't have them—it is that exclusive agreements negatively impact consumers by unfairly impeding competition.

Furthermore, it strains the limits of credibility to suggest that the smaller carriers can pool their purchasing power in order to acquire devices, because market power has been concentrated in the hands of the largest carriers over the past several years. As discussed previously, the largest four carriers have over ninety percent (90%) of the Nation's wireless service market, with AT&T Wireless and Verizon Wireless combining for approximately sixty percent (60%) of the market. These carriers have grown through acquisition after acquisition with seemingly no regulatory consideration given to market concentration. As a result, all remaining carriers re-

ardless of technology have less than 10 percent (10%) of the market. If the largest carriers are allowed to continue using their market power to thwart competition, we will once again have a duopoly for wireless services.

A second flawed argument is that there are plenty of device manufacturers from whom the smaller carriers can acquire handsets that are not bound by exclusivity agreements. This argument essentially boils down the concept that smaller carriers should offer the devices that the largest carriers do not want. If the non-exclusive devices were the type of cutting-edge, game-changing devices that attracted customers, you can be assured that the mega-carriers would be locking those devices up with exclusive arrangements.

F. Efforts at the FCC

On May 20, 2008, Rural Cellular Association (“RCA”), of which Cellular South is a member, filed a Petition for Rulemaking (“Petition”) with the Federal Communications Commission (“Commission”), asking the Commission to investigate the widespread use and anticompetitive effects of exclusivity arrangements between commercial wireless carriers and handset manufacturers, and, as necessary, adopt rules that prohibit such arrangements when contrary to the public interest.

Only the four largest carriers and one manufacturer expressed opposition to the RCA Petition. In contrast, over two hundred (200) parties representing the rest of the wireless industry and the public interest community expressed their unconditional support for RCA’s petition either individually or through their trade associations. The message of the majority was clear: free market competition and innovation has been strangled by large carrier demands for exclusive access to the latest advanced devices.

The market is distorted when a single carrier is allowed to have a monopoly on a device. Action is needed now to restore competition in the handset market and to ensure that consumers have the option to choose both the device and the service provider that they want.

II. Roaming

On the topic of roaming, far and away the most important issue is that of automatic roaming for data services—specifically, roaming for high-speed data such as EV-DO, HSPA, and as we go forward, both WiMAX and LTE. An equally important aspect of roaming is the issue of interoperability which allows seamless transitions between networks.

A. High Speed Data Roaming

When I began in this industry, roaming agreements were standard practice. As networks expanded across the country, consumers came to expect their device to work, wherever they happened to be, regardless of who they chose as their service provider. Roaming agreements for voice service could be negotiated and finalized in hours or days. Recently, the FCC mandated that all carriers enter into roaming agreements for voice services, but did not extend that mandate to data services.

As technology has advanced in the industry, consumers now expect to be able to send and receive e-mail and access the Internet over their devices, again wherever they happen to be. In order to accomplish this, a roaming agreement that covers data services must be entered into among carriers seeking access to distant networks. Instead of data roaming becoming routine, some of the largest carriers have been refusing to enter into data roaming agreements—as a means to restrict competition. Today’s wireless devices do so much more than just make phone calls, and new applications are being introduced every day. Consumers literally have access to the world at their fingertips with today’s wireless services. However, this world is often unavailable to many consumers because the largest carriers refuse roaming agreements for high-speed data.

Regional and rural carriers offer network access in areas that the largest carriers have not and, likely, will never build out on their own. These smaller carriers do not seek these roaming agreements as a means to actively market outside their footprint because: (1) that is not the goal in seeking roaming, and (2) even if that were the goal, roaming rates are too high to make an economic case for that type of growth. Our customers travel just like the customers of the big carriers and we believe that consumers should be able to use their devices wherever they may be. Besides, this is not a free ride for us—we pay for the service that our customers use on distant networks.

At the FCC, some Commissioners question whether they have authority to mandate data roaming. While we believe that the Commission has the power to resolve this issue, there is no doubt at all that Congress has the power to address high-speed data roaming obligations. By requiring carriers to provide automatic data roaming to requesting carriers that use a compatible technology, Congress can en-

sure that consumers never again find themselves unable to utilize the indispensable data features of their wireless device when traveling outside of their home carrier's footprint.

B. Interoperability

A related matter in the roaming discussion is the issue of interoperability between wireless carriers. At its most basic, interoperability allows consumers to move seamlessly from one network to another. In other words, the networks are configured in such a manner that the consumer gets full access to the features on his or her device whether that consumer is at home, or traveling on the other side of the continent. The applications that are possible with interoperable networks are virtually limitless:

- Navigation—the ability to provide turn-by-turn directions to end users outside the home footprint.
- Tracking—the ability to track a device, package, or other shipment nationwide instead of just inside the home footprint.
- Person finder—the ability to use a child's phone to find a lost child outside the home footprint, or to use a wearable device on a vulnerable adult to prevent them from becoming lost.
- Weather Applications—the ability to passively provide the current and forecasted weather conditions in the location where the end user is currently located. This would include severe weather alerts and warnings to move out of a storm's path.

Each day, consumers rely more and more on the data capabilities of their wireless devices. As wireless providers deploy 3G and 4G technologies, we are entering a world where even voice communications are treated like data transmissions. It is not acceptable in this era of wireless technology that there would be a roaming requirement for yesterday's voice traffic, but not for the data services of today and tomorrow. Consumers need a solution and Congress is in the clearest position to provide it.

Conclusion

As you can see, we are at a critical juncture in the wireless industry. Decisions made today will determine whether our industry becomes more consumer-friendly and innovative as a result of increased competition, or whether the trend toward a duopoly will continue and competition will be eliminated.

Although the wireless industry may no longer be in its infancy, it is no more mature than a gangly teenager. There is much innovation left to be done. There are more people of all socio-economic backgrounds and geographic locales who have yet to benefit fully from the wireless experience. Before it is too late, Congress must step in and put an end to the largest carriers' stranglehold on devices, as well as ensure full roaming access. A light regulatory touch today will prevent the re-emerging duopoly in which two companies control all the customers, all the devices, all the prime spectrum, and become "too big to fail."

Thank you again for the opportunity to be here today. I appreciate your time and your interest in these issues and look forward to discussing them here this morning. With that, I welcome any questions you may have.

Senator KERRY. Well, thank you very much.

We have some clear lines that have been drawn, and I'd like to kind of probe that a little bit, if we can here. And I invite a healthy back and forth, frankly. I don't like hearings where we just sort of, you know, constrain between the questions. So, if somebody wants to dig in, counter somebody, I'd like you to do that.

Why—first of all, listening to you, Mr. Roth, and also Ms. Esbin, I accept the benefits that you articulated, but I'm having a difficult time trying to envision why an innovator, given the size of the market and the numbers of outlets, is not going to innovate in order to produce a product that is equally as competitive, that does all the whiz-bangs and gadgets and bells and whistles it has today, even more so, because it wants to appeal across different providers in order to gain as much market share of each of those providers that it can. So, I'm having trouble understanding why that innova-

tion would be curbed. I just don't see that, given the size of the market here.

Mr. ROTH. I'd like to—I'd like to answer that. Because—I think there are two stories that might really help shed some light on that. The first is a colossal failure and the other one has been a real success.

And I think I'll start with the failure. The first iPhone, the first attempt at a music-centric device, was this device I hold right here. And I know you can't see it from here, but it was the Motorola Rocker, and I don't know if you've all heard of the Rocker. It was our first attempt. Motorola, Apple, and AT&T went together in 2005 to create a device that we thought would cater to the music-centric. It was the predecessor of the iPhone, if you will, colossal failure. I still have them in inventory. And I don't hear Mr. Rooney or Mr. Meena asking for the Rocker. I have plenty to sell, still.

But my point of that was, Motorola bore the brunt of that, so did AT&T. It was a huge risk for both companies. Large inventory commitments were made, production was—on a device that we thought would be successful, and it wasn't. So that type of risk is what manufacturers are looking for carriers to say, if you want to specify a device, you want to bring innovation that's not part of their product roadmap, then you need to share the risk with us.

So I'll give you an example of a success, and I kind of look at the age of the group that sits behind you all. About 3 years ago we saw texting as a trend that we thought would come to the youth of America. The Blackberry was the only texting device that existed. We go to Korea, and we do this every year, we travel the world. We go to Korea 24 months ago, and we sat down with them, and we talked to manufacturers about a low-cost device that had a "qwerty" keyboard for texting, and we wanted it for the teen market in the United States.

We met with Samsung and we met with LG. That's not what was on their product roadmap, that was a significant risk for them. That wasn't the product that they planned on introducing on a global standard, but it's what we wanted. So, we went to them and we had to commit significant inventory, technical resources, marketing dollars, inventory space in our stores, in order to bring that product to market. We bore the risk of that. Unlike the Rocker, the little Samsung Propel, these little texters, enormously successful, and we've borne—we've borne the fruits of that.

So, there's—I think that story—the tale of two cities kind of tells the story. Manufacturers want someone to share the risk, when what you're asking for is something that's not on their product roadmap.

Senator KERRY. Now, Ms. Esbin, in her testimony, talked about how this would involve a particular model for a particular period of time. Is that in fact true, that—with respect to AT&T, the iPhone is for a particular period of time?

Mr. ROTH. Yes, sir, it is.

Senator KERRY. And what is that period of time?

Mr. ROTH. The term of the agreement we've not disclosed. It's a confidential fact, but what we have said when we introduced the iPhone, is a multi-year deal that we signed with Apple.

Senator KERRY. Well, in terms of our, sort of, thinking about marketplace power and access, is it important for us to, perhaps, have some sense of that time period?

Mr. ROTH. I think it's probably——

Senator KERRY. Might that not weigh in to, sort of what the equities are here, as we look at this. Because, you have a legitimate point, I raised that very point with my own staff, and I ask it of Mr. Rooney and Mr. Frieden and Mr. Meena. Why, in the American way of doing business, does a company not have the right to go sit down with somebody, assume a certain amount of risk together, enter an exclusive arrangement to assume that risk, and if they come up with a successful product, why don't they have a right to market that product in this way? What distinguishes this from other exclusive arrangements in the marketplace?

Mr. Rooney?

Mr. ROONEY. Two things, one, we do that all the time in other businesses, give people exclusive marketing rights for a period of time, and then after that, other businesses have access to it through licensing fees and other things.

Senator KERRY. As they've said, it's for a period of time. I don't know what it is yet.

Mr. ROONEY. This is years, not months.

Senator KERRY. So you think——

Mr. ROONEY. Here's the result.

Senator KERRY. Isn't there a legitimacy to having a sufficient return on investment and taking a success story and riding it for a period of time?

Mr. ROONEY. With all due respect, here's the result. There are 14 new products out there right now, that are exclusively licensed to the Big Four. So that Mr. Meena and our customers have no access to these. What is happening is everybody now is going—and the Big Four is using their power to get exclusive rights to these phones. So, we're stuck with whatever comes out other than these. And it really puts a big dent in our ability to compete, it puts a big dent in our ability to supply these phones to areas of the country where we serve customers that the big guys don't.

Senator KERRY. Now I'm going to be very provocative—I'm going to be provocative here on purpose and be a little bit of a Devil's advocate, because I want to get at this, but not because somebody represents where I've landed here.

But some people might argue, hey, you guys are complaining because, you know, they've been more successful than you have, they've carved out a good concept, they have a good product, they created a joint effort. It's not as if people don't have access to the market. People can go and they can either do the Blackberry, they can get the phone, they can get the iPhone, they can have choices as to which combination of provider and product they want. Would you argue that there's insufficient availability to the consumer of those various combinations?

Mr. ROONEY. If you lived in Chicago or New York, I would agree with you. But if you live in rural Iowa or rural Wisconsin or rural Missouri, then you've got problems.

Senator KERRY. Those can be very important to some of us here.

Mr. ROONEY. That's right, exactly. I know who's on this committee. So, I mean, it's a question here of—in terms of rural America, they really pay the price. In terms of urban America, there are more options, and yes—what it does is it hinders our ability to compete in those markets, but it doesn't eliminate completely the customer's choice.

Senator KERRY. Mr. Frieden, is there something that makes a wireless network different from a cable network or a satellite network? Do we need to be thinking about the network itself, as a sort of, you know, public utility, in essence, and provide greater access to it, regardless of the innovative component that Mr. Roth appropriately talks about?

Mr. FRIEDEN. Yes, the *Carterfone* policy addressed a wired network. A wired network which doesn't use spectrum, can perhaps be more easily technically managed. But, I don't want to overstate the innovativeness of engineers to solve the spectrum issue. I mean, we have different cellular technologies, different cellular frequencies, different cellular transmission formats, and standards can be reached. So, I don't see the use of spectrum as preventing the ability of engineers to find interfaces that would make wireless *Carterfone* a possibility.

Senator KERRY. Well, should we accept that wireless carriers can dictate to a consumer what technology they have to—they can and can't use to access a network?

Mr. FRIEDEN. Well, my concern is—

Senator KERRY. Is there adequate competition among those networks, that we could allow that?

Mr. FRIEDEN. Where there are lies, damn lies and statistics. When you look at the wireless industry, there are two ways to examine it. You can say it's robustly competitive and the carriers certainly are advertising how great their service is and how reliable their service is and how nifty their new handsets are. But truly there are four major carriers. And if you look at the penetration statistics, they're sharing 90 or so percent of the market, with Verizon's acquisition of Alltel.

Going back to innovation, there really are two types of lock-in and lock-out, both in terms of the handset and access to the devices of the handset and software. There's this 2-year service commitment, and now we're talking about a multiple year, indeterminate period in which Apple has an exclusivity arrangement. That may serve Apple's interest in cache, but in terms of promoting innovation and access to those innovations, you're really locking consumers to one carrier.

Senator KERRY. Let me just ask a final question, because I want to get Senator Wicker in on this, and cede the chair to Senator Klobuchar.

But, you have laid out some of the restrictions that are placed on handset technology, by a carrier like AT&T. For instance—and he said, Mr. Roth—Mr. Frieden is saying, that for competitive purposes, you are blocking out certain applications. For instance, Skype is blocked out on an iPhone, and obviously that has to do with the question of who pays for what, and with Skype you don't.

Also Mr. Frieden points out how we, sort of, take for granted the right to own and attach a telephone or a TV or a computer to a

network, without particularly worrying about the cable company or the telephone company telling us what kind of equipment we have to use. Why is this not completely analogous to that, and is there a detriment to the blocking out in that way? Or is that merely then a choice, if you don't buy an iPhone, you go somewhere else, I mean, what's your feeling about that?

Mr. ROTH. So—so, I don't think it's analogous to the television, the PC, or the home phone, for one primary reason. In the United States there are two very different technologies. There's the CDMA technology used by Mr. Rooney and Mr. Meena. There's GSM, which is the global standard that AT&T uses. I could give my iPhone to Mr. Rooney and tell him he could take it home, it's not going to work on U.S. Cellular's network. That's—they don't have the global standard. It's a VHA, Beta debate from a technology standpoint. So, we have two very different networks, there's the global standard, which most of the world uses. And there's CDMA, which, if you will, is the Beta version of the debate.

The other thing is that—I want to clarify—we are open. You can download Skype and you can use it on an iPhone in a Wi-Fi environment. You can—and I would encourage Skype to do what they've done in Europe. They actually have a phone they brought to the market, and they sell a Skype phone in Europe where you can do voice over Internet calls. The reason that we don't want a partner to offer Skype on the iPhone is we subsidize the iPhone. I don't want to—and Skype would be a direct competitor. There's no business logic in taking a Skype application on a phone that I subsidize, and then opening up to my competitor.

But Skype could bring an—could bring their own phone to America, for \$25 they could go to our store and buy a SIM card and use the GSM technology and standard to compete.

Senator KERRY. So what you're saying is, that they may be blocked in one modality, but they're not really stopped from being able to access the market—

Mr. ROTH. Yes, sir.

Senator KERRY.—or sell a product.

Mr. ROTH. Yes, sir. Our network is open. That's the first thing I want to communicate. Our network is open, and if you want to bring your own applications to our network, you can do that. But the devices we subsidize and buy down, sell below their cost, we don't want to enable a competitor to use those devices.

Mr. MEENA. Mr. Chairman, I'd like to respond to Mr. Roth's kind offer on the—offering us the iPhone. Last year we did a detailed study to look at what it would take to move to the GSM world, and we studied financial concerns, we studied device availability. And we found out the GSM world was more constrictive than the CDMA world in device exclusivity.

And I can tell you there's one device we sure couldn't have gotten, no matter, he threw this thing over here at me, we would not be able to get an iPhone. We found that out in our research.

Senator KERRY. Well, that's interesting. There are a lot more questions to exhaust this topic, obviously. I will rely on my colleagues to do that.

We're going to leave the record open for a week, in order for colleagues to be able to submit questions in writing, which I'm con-

fidant a number of them will do. And I will submit some additional questions in order to fill out the record.

I greatly appreciate your being here. I'm grateful to Senator Klobuchar for taking on the Chair.

And I recognize Senator Wicker.

**STATEMENT OF HON. ROGER F. WICKER,
U.S. SENATOR FROM MISSISSIPPI**

Senator WICKER. Well thank you, Senator Kerry.

Before I ask a question, of course we're always glad to see witnesses come from the various states.

Mr. Meena is a constituent of mine, from Bridgeland, Mississippi. As you know, he is CEO of Cellular South. And it's one of the largest privately held wireless providers in the Nation, with 900 employees, a good many of them in Mississippi. And, Mr. Meena, I believe you have your family here with you.

Mr. MEENA. I do. I have my two oldest sons, and my wife is here today.

Senator WICKER. Great, well we're glad to have them.

Mr. MEENA. Thank you.

Senator WICKER. You've been itching to get into this debate, here. What about the point that Mr. Roth makes, that time and money used to develop the next breakthrough device, and he says AT&T is entitled to a return on the investment that his company legitimately made in the iPhone. So, I want to give you an opportunity to respond to that claim.

Mr. MEENA. Their primary investment in the iPhone was in the network. We put in—we put in a 3G network without any guarantee from Apple or any other manufacturer that we would have access to a latest technology device. I don't know why they have to be guaranteed success when we don't—we're not guaranteed success. We're willing to get out there, put our capital to work, put in 3G speeds throughout the State of Mississippi and other places, and be able to compete in the marketplace. It does make it tough though, when you cannot have access to the latest and greatest technology.

Senator WICKER. You know, I see the commercials for Cellular South, when I'm home in Mississippi. You're proud of the coverage that you have.

Mr. MEENA. Yes, sir.

Senator WICKER. And, would you—is it your feeling that there's better coverage for Cellular South in the State of Mississippi than any of the other providers?

Mr. MEENA. No question about it. We have better urban coverage and better rural coverage. We have taken the opportunity to drop leaky coax down hospital elevator shafts to make sure that urban hospitals are covered. We cover out in rural areas, we cover the Mississippi delta extensively. We cover Rena Laura, Mississippi, as well as we do Memphis, Tennessee. It's just part of—it's just part of who we are and what we do.

And that's why it's so frustrating for the consumers. There's no reason, in this day and time, for consumers to not have access to the best network and the best devices, and the best applications, and high-speed. We can do that as an industry. Why not do it?

Senator WICKER. So, that 18-year-old kid that's hunting out in the woods near Rena Laura, he might like to have an iPhone. But if he doesn't have coverage, really that consumer is prevented from having the consumer choice that we kind of like to talk about in the United States.

Mr. MEENA. That's correct. If he has an iPhone and if AT&T does not have coverage there, that's not doing him a lot of good out on the deer stand.

Senator WICKER. Now, do I understand that—that we don't know how long this device exclusivity with AT&T and the iPhone is. Is that correct?

Mr. MEENA. I don't know for sure. I have heard 5 years, but I can't say that I have.

Senator WICKER. Yes, I've heard 5 years, too. Maybe someone—maybe our two researchers could tell us where we got 5 years. But I'm interested, from any member of the panel. Now, is it a fact that most exclusive arrangements last only 6 to 12 months?

Mr. MEENA. No, sir, that's—that used to be the fact. And we moved from a time period where the exclusivity period was 90 days to 180 days to measure in years and now there are lifetime exclusives on devices. And, so that's why it has become more and more and more unacceptable to those of us—

Senator WICKER. So, we didn't have a lot of complaints when there was a reasonable short period of time to get a product going?

Mr. MEENA. There were some complaints, but not like it is today.

Senator WICKER. Now Mr. Frieden, you heard Ms. Esbin's testimony. What's wrong with her research?

Mr. FRIEDEN. I'd like to think great minds can think differently, but—it probably gets down to how you define the market. I mean, I do research on market competition. I look at the wireless industry and I see four carriers with a 90-plus percent market share. I know they compete vigorously on television. I know they tell me how great their service is. And I know they certainly want to showcase their telephones, but I don't see the robust competition and the pushing of innovation as could be.

Going back to, sort of a historical analogy, when I hear about exclusivity, on one hand, there's something called a "Colgate Doctrine" and Colgate can sell toothpaste to anybody. But we're talking about an essential resource that's really part of our DNA, part of what makes our global information age work. And, in the past when we've had—

Senator WICKER. And that is choice.

Mr. FRIEDEN. Yes, choice, but bringing it back to telecommunications, we had a time when there was a telephone, and that telephone accessed AT&T. And if you wanted to access MCI, you got inferior interconnection or you had to dial 27 digits instead of 7 digits or 10 digits. And that exclusivity was something that the courts and the FCC ultimately found illegal and inappropriate. The choice was to have multiple carriers via the same telephone.

Senator WICKER. Ms. Esbin, where did Mr. Frieden go wrong there?

Ms. ESBIN. Well, I think it's reasonable minds may disagree. I think your mind is great, too.

But, I think the problem is one of perspective rather than the data. Compared to the wireline world, having the original two cellular carriers per market—local market, looked like a great leap forward, and the FCC was able to find, based on the record at the time, in 1992, that there was enough competition that they could permit exclusive handset agreements.

Following the Budget Act of 1993, when more spectrum was opened up and the regulatory framework for commercial mobile radio services was established, the idea was to introduce more competition into the market and reduce economic regulation. And I think that the results have been pretty good. As I said, it is not perfectly competitive, you won't find that in a networked industry like communications. But if you compare it to the local wireline phone market, which today has more competition, but still not at the level of the wireless market. I think the wireless market was always held up at the FCC as a poster child for competition and a light touch approach to regulation.

And I believe that part of the problem is, what is the correct market definition, and the FCC has looked at it from the local market, how many competitive choices do I have where I live, not how many competitors are competing nationally.

Senator WICKER. Madame Chair, I think the clock has gone a little haywire, but if I could ask one more question.

And to Mr. Frieden and Ms. Esbin, what's going to happen to Mr. Rooney's company and Mr. Meena's company if these indefinite 5-year-plus exclusive agreements continue? Are they going to be able to survive? And will that be good for competitiveness?

Mr. FRIEDEN. I think they are going to be able to survive, but is the Nation going to suffer a disadvantage when this digital divide extends into wireless? Wireless is certainly that third wave, that third screen. Increasingly we look to wireless to access the Internet. Congress has legislated a mandate to the FCC to promote access to the Internet, to promote ubiquitous access to advanced telecommunication services, and increasingly that's going to be a wireless technology that gets there. So, if we continue to have a broadening of this digital divide between urban and rural, when you serve rural areas with inferior service, rural areas will suffer comparatively and competitively with their urban counterparts who have much better choices, much faster access to the Internet and the like.

Senator WICKER. Ma'am?

Ms. ESBIN. I tend to look at this more as a lag than an unbridgeable divide. My own research has indicated that the period of time for the exclusives that we're probably talking about here, the iPhone and some similar products, is under 5 years, and is more in the nature of 1 to 2 years. I've read a number of analysts—industry analysts reports, and they seem to believe that the period is quite a bit shorter than 5 years.

The other point I would make about the iPhone in particular is, this is Apple's choice and I don't believe the carriers were calling the shots with Apple on this particular device.

In conclusion, I fully expect Mr. Meena and Mr. Rooney's companies to not only survive, but thrive in the future. I just don't think that this one device is the key to their survival.

Senator WICKER. What about the huge list that Mr. Rooney held up? It's not one device.

How long was that list, Mr. Rooney?

Mr. ROONEY. Fourteen.

Senator WICKER. Fourteen devices.

Mr. ROONEY. Currently.

Mr. MEENA. And nine of the top ten selling devices now are under exclusives, as well.

Mr. ROONEY. And the other side of this coin is, it's the customer that suffers, not my company. I can't—there are areas that I serve, and we're probably, in terms of geography, you know, 50/50 between rural and urban areas. And, we've got areas where we're the only carrier. I don't know where all these statistics about 12 carriers in an area are. I don't know of any of those areas.

But the point is, we serve many areas where we're the only carrier to build cell sites in the area. And those customers cannot get any of those phones. So, when we talk about using 3G to access broadband in rural areas, which is probably the most economic way to do it, we are working at a disadvantage.

Senator WICKER. Well, Senator Klobuchar, thank you for—no, I'll shut up for a while.

But, I have to agree with Senator Kerry, there are—it's a complicated issue and there are a lot of questions to be answered. I'd—it does seem to me that the consumer and the ability of the consumer to have access and choices should be paramount.

But thank you and I'll—I'll listen to your questions, ma'am.

Senator KLOBUCHAR [presiding]. OK. Thank you very much, Senator.

Thank you to our panelists. I'm going to try to follow up on some of the initial comments of Senator Warner. I figure he did pretty good in this business. I was a telecom lawyer for 13 years, he did a little better.

So, I'm going to follow up—he was asking the Balkanization of this and his concern that if you start having these exclusive arrangements, you could potentially have AT&T with the iPhone, you have Verizon with someone else, and it just leads to the situation where, if we had done this in the past with say, in the computer area, it would be like Microsoft and IBM having an exclusive deal, and you would actually never have had a Google, because who would have wanted to make deals with some of these start-up companies that might not have had much promise.

So, I have a big concern there about the innovation, as well as the long-term effect this could have on the pricing. And we already have concern on pricing with text messages and other things that we—actually, in the Judiciary Committee we had a hearing on this yesterday.

So, I want to start with you, Mr. Meena. In your testimony you say that device manufacturers would like to open their portfolios, but they cannot do so because the largest carriers will not allow it. Could you expand on what the dealer said?

Mr. MEENA. Yes, we have been—we formed a buying group, associated carrier group several years ago. We have been to Korea, we've tried to meet with manufacturers in Korea about purchasing the latest and greatest devices. And it's hard to get a straight an-

swer when we talk to them about those devices. They—it seems like they would be able to make the decision as to whether they could sell their product to us, but they’re checking back with somebody, and we think we know who it is.

Senator KLOBUCHAR. What did the dealers allege the largest carriers would do if you—they started doing business with you?

Mr. MEENA. I guess they would cut off business with those manufacturers is my—that’s my guess. I don’t know that for sure.

Senator KLOBUCHAR. You’re just having trouble getting any kinds of these devices?

Mr. MEENA. We can get—we can get some of the lower-end devices. When it comes to the higher—the high-tech, latest and greatest, touch screen type devices, we really struggle in doing that, the type of devices that the market is demanding today.

I’m often asked, since we serve a lot of rural areas, “Mr. Meena, what is it that your customers want?” Our customers want the same thing in rural areas, what their urban customers want in metro areas. That’s exactly what they want and we want to be able to provide those types of devices and services and have done it for many years in our network, and want to continue to do so with the devices and applications that we offer.

Senator KLOBUCHAR. Mr. Rooney, have you had similar experiences?

Mr. ROONEY. We have not had that type of similar experience, but we know that we have 14 on my little list here, that I can’t get a hold of. So, when you’re sitting there trying to build your portfolio, you’re already stopped from getting—as he pointed out—as has been pointed out by Mr. Meena—nine of those fourteen are the top-selling devices. So, we can’t get them.

Senator KLOBUCHAR. And I think Mr. Meena was referring to the largest carriers demanding and receiving long-term agreements from the manufacturers.

Mr. ROONEY. Well, all I can tell you is what’s going on. I judge what’s happening in the world by the results, not necessarily—

Senator KLOBUCHAR. Do you think that—so do I—do you think that manufacturers feel obligated to grant these exclusive deals for fear of being locked out of an American market, if they don’t acquiesce with—

Mr. ROONEY. I don’t think they’re going to be locked out, but let’s put it this way, they maybe have more favorable access.

Senator KLOBUCHAR. Mr. Frieden, do you want to comment on that?

Mr. FRIEDEN. Yes, ma’am. These statistics are very hard to come by, because they are largely trade secrets. But I understand, from credible statistics, that a major carrier like Verizon looks to get 65 percent or so of its handsets sold, bundled with the handset from a Verizon store. And then you have to add about 20 to 25 percent for big box retailers like Wal-Mart and Best Buy. The vast majority of sales of the handset is coming from that one single business model, so the big carriers have substantial buying power, and the fact of the matter is, we don’t have a manufacturer here, perhaps because of that.

Senator KLOBUCHAR. Mr. Roth, as we look at this competition issue—and I listened with interest to your—the innovation argu-

ment. I can actually see this as a start-up model. I could see, you know, the early days of TV, that they might have had a deal to innovate and do something differently, but I'm just trying to figure out how it is good for competition if the most popular devices that are rolling off the product lines are gobbled up by just a few large companies in exclusive deals. How can that be good in the long term?

Mr. ROTH. Well, as I'm listening today, there are two misperceptions that are starting to brew, and it's real important for me to take issue with both of them. One has to do with rural Americans and their access, and the other has to do with exclusive devices.

Let me start with, 35 percent of AT&T's portfolio is exclusive, 65 percent of our portfolio is not. Let's start with how exclusive devices actually come about. The manufacturer doesn't fly over from Korea or fly in from Canada and open up a suitcase, and say which one of these do you want to buy and monopolize in the U.S.? That's not the way it happens. You can buy what they want to sell. They come over with a suitcase, they'll show you the devices, and you can buy what they want to sell you. Or you can sit down with them and say, "I want a touch screen device, when no one has a touch screen device," or, "I want a two-way slider device that allows someone to text, and I want this chipset in it, and I want it in this color, and I want it at this price."

So, the exclusivity starts with the carrier sitting down with the manufacturer and saying, "I want you to produce something that's not on your product roadmap." And the manufacturer says, "There's significant risk in me doing that, you need to share that risk with me, volume commitments." You can't make a volume commitment if it's suddenly going to be available to everybody if it's wildly successful. You won't achieve your volume commitments back to the manufacturer. So that's one of the risks associated with that.

Another thing—I really want to talk about this rural America. AT&T today serves over 90 percent of the U.S. population, with the divested assets that we're trying to purchase through Alltel, it will be 95 percent. We spent \$2.3 billion buying the assets from Verizon, largely to serve areas that are rural.

We spent \$8 billion in the 700 megahertz auction to fill in the rest of the United States, to bring places like North Dakota, South Dakota, Wyoming, and Montana. AT&T competes as aggressively in rural America, whether it's Mississippi or whether it's Michigan. We compete as aggressively in rural America as we do in major metro markets. And, our history of buying companies like Dobson and bringing the iPhone to Alaska, buying rural, parts of rural and bringing the iPhone and other devices to Maine and New Hampshire. You pull all that together, we have a history that says we're very much interested in serving all of America.

So there are two misperceptions, one, how exclusive device deals start, and two, that we're somehow rural Americans who are disadvantaged. I don't disagree that small carriers or rural carriers might be disadvantaged. I'm not in their business, I don't run their business models. But rural Americans are not disadvantaged.

Senator KLOBUCHAR. But don't you think having competition with people being able to choose their own carrier can be good for prices and good for our country? And if they can't compete equally because they don't have access to the same equipment, you might not have an equal playing field for competition.

Mr. ROTH. I don't disagree with what you're saying, but there's a difference between having no competition—there are—95 percent of Americans have three carriers today to choose from, 95 percent of Americans. And with the build-out of the 700 megahertz auction, that's going to—that number is clearly going to go north of 95 percent.

So—

Senator KLOBUCHAR. It's just my own experience and I want to kind of get off the rural issue for a little bit. In the rural areas, you can have—on our campaign we carried three different phones with three different services, because it isn't quite true because you can have areas of dropped calls and very problematic service with one of the large carriers—

Mr. ROTH. And you can.

Senator KLOBUCHAR.—in rural areas.

Mr. ROTH. You can. I mean, let's take Minnesota, we bought Dobson so that we could get 850 megahertz spectrum in places like Minnesota. We've had it a year and a half. We bought a fixer-upper. Some of our networks like Miami or Dallas, we've owned for 25, 26 years, they're a much better performing network. The areas that we bought in upstate Maine, New Hampshire, and Minnesota, we're putting money into it and we continue to improve it, but they're 21 years, 22 years behind some of the markets we started.

Senator KLOBUCHAR. You know, Verizon just went on to a 6-month exclusivity contract for two of its models. This came out at our hearing yesterday. Would that be something—are you doing that with some of your models, or are they down to lower, or have you gotten rid of exclusivity, not including the iPhone.

Mr. ROTH. So, 35 percent of our portfolio is exclusive as I sit here today. Some of those—some of those terms are as little as 6 months, some of them are longer. Sixty-five percent of our portfolio is not exclusive.

Mr. MEENA. But it's the 35 percent that's attractive, the most attractive part of the market.

Mr. ROTH. That's not a true statement. The number one selling device we have is not an exclusive device. Our top selling device is the GoPhone. It's the \$19.99 phone that you can buy in Wal-Mart in a little round box. That's our top selling device, it's not exclusive. That's our number one selling device.

Senator KLOBUCHAR. There are a few people shaking their head no, they don't think that's—

Mr. ROTH. That's our number one selling device.

Senator KLOBUCHAR. Mr. Meena?

Mr. MEENA. I'm all for not having exclusive devices. The BlackBerry Curve is a non-exclusive device that we all have access to. It's the number one selling device in the country. But the facts state that nine out of the top ten—top selling devices are under exclusive arrangements.

And I want to say something about the 700 megahertz auction. We participated in the auction as well. We were——

Senator KLOBUCHAR. So what—I'm just—Mr. Roth said something—you're saying nine out of the top ten selling devices in the country are under exclusive arrangements?

Mr. MEENA. Yes, ma'am.

Senator KLOBUCHAR. And is that not true, Mr. Roth?

Mr. ROTH. That's not true in my company. I don't know where Mr. Meena is getting his data——

Mr. MEENA. That is an industry——

Mr. ROTH.—but in my company——

Mr. MEENA. That is an industry statistic.

Mr. ROTH. Well, the number one selling device in AT&T is the GoPhone. It's the number one selling——

Mr. MEENA. The GoPhone is a phone that's targeted to a certain segment of the market. We're talking about all segments of the market, and we know that certain segments of the market are interested in the devices he has under exclusivity.

Senator KLOBUCHAR. You know, in your testimony, Mr. Meena, you suggested that smaller carriers haven't been able to consolidate purchasing power to gain access to these devices. While it may be true that manufacturers can't sell you devices under exclusive arrangement, why can't they design new handsets for you? What's the issue, do you think?

Mr. MEENA. I don't know why they do, I don't know why they can't. I may—it could be a volume issue, it could be that they don't want to infringe the type of devices that the larger carriers are selling.

Mr. ROONEY. I can shed a little light on that. If you took all the sets sold by the non-top four suppliers, so you take out Verizon, the rest of them, we couldn't even equal one of the Verizon or AT&T's volume. So, you know, it's a volume game, so if you want to consolidate, you've got to have enough volume to justify the consolidation, and it's just not there.

I mean, these guys have, basically they've gobbled up all the spectrum, they've gobbled up all the—they control the manufacturing side of the business. You're building an oligopoly there, and, you know, it has already happened. So—and all this exclusivity does, is it effectively causes more difficulty in terms of trying to compete against that entrenched group.

Senator KLOBUCHAR. OK.

In comments filed yesterday with the FCC by a consortium of consumer groups, the—it was stated that, "Handset manufacturers in Asia and Europe are able to sell 70 to 80 percent of devices independent of exclusive deals with service providers." And a 2008 article in *Wired* recently noted that handsets in Japan have been the envy of consumers in the United States, whereas cell technology has trailed the Japanese handset market by an estimated 5 years or more.

In light of these statements, can you explain, Mr. Roth, why this exclusive handset deal is necessary in the U.S.?

Mr. ROTH. So I'm not familiar with this study that you're referencing. So, I would tell you that it is my view that the U.S. lagged the world, so I believe the information you say is true, but

I don't believe it's true of today. I think that was true 5 years ago, but that's not true today.

I mean, iPhone came first to the U.S. The Blackberry Storm, the Palm Pre, these are devices that are hitting the U.S. first, and I think they're hitting the U.S. first because we finally have the ability to compete on a world level with Deutsche Telecom and Vodafone and other major carriers who can go to manufacturers and can do the same thing as we're doing.

So, I believe that you also find, that on a cost-per-minute and cost-per-megabyte, which is how we measure data, the U.S. has—the lowest rates. So, I think we have the most innovation. I think we have the lowest rates. And I think we have the most choices for consumers.

Senator KLOBUCHAR. It just seems when you have—I think it's what, 270 million consumers, and I think the Chairman remarked, the fastest growing market, that there would be a demand for these products in the United States. And that's what I'm trying to deal with here, is, you know, you have carriers—I don't want to be stuck with one kind of service if I want one kind of phone. And I think that's how a lot of consumers feel. And, there are problems, as Mr. Rooney and Mr. Meena pointed out, in certain areas of the country where a certain kind of service won't work, so then you can't have—have your phone.

And while I believe that there may be arguments for the start-up piece of this and for some limited exclusivity arrangements, my concern is, if they go on too long, we are really going to be hurting competition and we're really going to be hurting the prices. If you just want to comment on that as the end to this. I think Mr.—I am the last one here as the Chair wielding the gavel, but if each of you just wants to comment on that near the end.

Mr. Roth, if you want to start.

Mr. ROTH. For me there's a track record that says the United States—that since the iPhone was launched in June 2007, what we've seen is a greater pace of innovation that we have ever witnessed in this industry's history. The 30 new devices that have come out, the 30 new smartphones that have come out to challenge the iPhone are a direct response to the fact that not all carriers have it, in fact only AT&T has it. So in order to compete, other manufacturers and other carriers had to partner to race innovation out to the market. I think it's working, I think it's working extraordinarily well.

And as I talked about with the iPhone, three new models have come out while it has been exclusive for AT&T. The price has dropped three times since it has been exclusive with AT&T. I think consumers have benefited. And when you look at the 95 percent of the market that we'll serve this time next year, and more as we build out to 700 megahertz auction—from 700 megahertz, I think consumers are really benefiting at a point where now we're the envy of the world. We no longer lag the world.

Senator KLOBUCHAR. Mr. Rooney?

Mr. ROONEY. I think that the facts tend to speak for themselves. We have four dominant carriers. They control the supply chain, they control a good part of the spectrum, they control the industry. And it's a very difficult industry for those of us that are not in the

gargantuan size, to participate in. And it's—we love to participate. I think that there's a mythical aura to the idea that there's competition. I mean, it's not technical competition when you get a hold of the technology—somebody else's technology and don't allow it to be disseminated to anybody else. That says, I'm technically good and the rest of you are technically bad, or I have a better deal with Apple than you can ever get.

So, you know, what we're dealing with here is a series of complex issues about whether we're going to have robust wireless industry that is going to serve all the country or are we going to have a continued concentration of issues here, and we're going to have an oligopoly, which I will tell you, in most text books I've ever read, says pricing is going to become—and competition will hurt.

Senator KLOBUCHAR. Thank you.

Mr. Frieden?

Mr. FRIEDEN. Yes, I'd frame this in terms of innovation and incentives. When you have these exclusive dealing arrangements, the incentive is to lock down the handset and the intention is to recover the subsidy. I've no problem with the subsidy mechanism, but it does affect incentives and it does affect innovation.

Look at what Apple does: Apple upgrades the phones, sends a firmware upgrade, and that disables some of these self-help activities. Now the self-help activities might violate the warranty, violate the contract, but the fact that consumers are resorting to self-help at the risk of "bricking" the phone—rendering the phone disabled, tells you something about how they feel about those restrictions. When you lock out a consumer, when you deny access, when you limit the versatility of the handset primarily to cover the recovery of the subsidy, innovation suffers.

Senator KLOBUCHAR. Thank you.

Ms. Esbin?

Ms. ESBIN. I think there's obviously a great difference of opinion on whether the glass is half empty or half full in the wireless industry. I don't really have anything more to add about that.

Senator KLOBUCHAR. Would you worry though, if this just kept on and you'd have certain, you know, one kind of technology hooked in only with one service, and—for the biggest carrier and then you'd have another technology and then you'd have a bunch of people that couldn't—that wouldn't have the choice of their carrier because they wanted a certain phone?

Ms. ESBIN. I think—it's really an illustration of the fact that competition in this industry is—I don't know if the word is messy or lumpy—it is not perfect and not everyone in the country has every choice available to them. I'm not sure that we want to mandate a world in which every single service offering is identical. I tend to think—

Senator KLOBUCHAR. Oh, I don't—I don't think anyone up here wants to do that. We just want to make sure that we're putting the consumers in the middle here and picturing what may happen, and being concerned about it as this goes on.

Ms. ESBIN. I understand. I think, at this point, it appears to me that consumers generally are being well served. I think the duration of the exclusives is—is an issue.

Senator KLOBUCHAR. Thank you.

OK, Mr. Meena?

Mr. MEENA. Let's go back to the auctions of the late 1990s. We basically created seven national companies. And then we kind of got down to six, and then five, and then after last year, Alltel acquired by Verizon, we're down to four. Rumor has it we might be even down to three by the end of the year. Of course you still have rural carriers and regional carriers like ourselves, like our company and like Mr. Rooney's company that are out there trying to create a competitive landscape for the consumers.

But if we don't watch out, we're going to not be able to create that competitive landscape for the consumers, by the fact of all the consolidation of the spectrum, and the control over devices, and access to roaming, access to back haul, and a whole host of issues that are going on through the duopolistic, oligopolistic, however you want to describe the world that we find ourselves today. And I think that would be very detrimental to the consumer, if vibrant competition is not nurtured and remains live and well in the wireless space in America.

Senator KLOBUCHAR. And I think the argument there, for that in a bigger term is—you know, in the old days when we just had the local telephone companies, they were heavily regulated, the rates were regulated, all these things like early termination fee—everything was regulated. Then you go into a competitive environment with cell phones, where they really don't have that kind of regulation at all, because the argument that this is a highly competitive market, and it's new, there's innovation.

But then if you start Balkanizing it, as Senator Warner said, then you—then you have no regulation, no protections, and if the environment starts heading that way, where people don't have that kind of choice, I think that is the concern, if I can be so bold of a number of us up here, that these exclusive arrangements are what concerns us.

[Whereupon, at 4:35 p.m., the Committee was adjourned.]

A P P E N D I X

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARK WARNER TO MARK GOLDSTEIN

Question 1. I understand that several consumers have complained about poor wireless coverage in rural areas. Could you tell me more about the nature of their complaints?

Answer. While reviewing the quality of wireless phone service, we met with representatives of various consumer, industry, and state groups. Among these groups were national consumer organizations; industry associations and carriers; and state governments, including national organizations that represent state officials and officials from state utility commissions, offices of attorneys general, and offices of consumer advocates in California, Nebraska, and West Virginia. These representatives discussed concerns about wireless phone service that consumers have had in recent years, including concerns about coverage in rural areas. They cited geographic factors that contribute to coverage problems in rural areas. Specifically, consumers may experience more coverage problems in mountainous areas, since mountains block the radio signals wireless phones use to communicate. Wireless tower antennas are unable to serve as large an area in mountainous regions, since they rely on having a clear “line of sight” between the tower and the wireless user. Additionally, in areas with low population density where consumers live far apart, carriers may not have installed enough towers to provide full coverage over a large geographic area. According to one consumer group, carriers do not have an economic incentive to pay for more towers in areas with a small customer base. In either case, whether poor coverage is due to blocked signals or not enough towers to cover a large area, call quality problems, such as dropped calls, may result.

Question 2. What does the FCC do with complaints from rural consumers?

Answer. FCC follows the same process for handling consumer complaints, no matter where the complainant is located. This process includes several steps. After reviewing a complaint received, FCC responds by sending the consumer a letter about the complaint’s status. If FCC determines that the complaint should be forwarded to the carrier for a response, the agency sends the complaint to the carrier and asks the carrier to respond to FCC and the consumer within 30 days. Once FCC receives a response from the carrier, the agency reviews the response, and if FCC determines the response has addressed the consumer’s complaint, marks the complaint as closed. FCC officials told us they consider a carrier’s response to be sufficient if it responds to the issue raised in the consumer’s complaint; however, such a response may not address the problem to the consumer’s satisfaction. When FCC considers a complaint to be closed, it sends another letter to the consumer, which states that the consumer can call FCC with further questions or, if not satisfied with the carrier’s response, can file a formal complaint. FCC officials also told us that if a consumer is not satisfied, the consumer can request that FCC mediate with the carrier on his or her behalf; however, the letter FCC sends to a consumer whose complaint has been closed does not indicate this is an option. Additionally, most consumers may not know they can complain to FCC about a problem with their wireless phone service that their carrier could not resolve to their satisfaction. Specifically, we estimate from our consumer survey that only 13 percent of consumers would contact FCC about such a problem, while another 34 percent would not know where to complain. FCC reports quarterly on the number and largest categories of wireless consumer complaints the agency receives, but does not report more detailed information, such as which states complaints come from.

Question 3. What do you think the FCC could do with these complaints to improve their telecom policy, particularly with respect to rural services?

Answer. As part of our ongoing review, we are examining how FCC oversees the services wireless phone service carriers provide to consumers, including how the agency monitors wireless phone service consumer issues to identify trends or problems that may indicate the need for a change in policy. FCC’s consumer complaint

data are one potential source of information the agency may be reviewing as part of its monitoring efforts. We plan to report on FCC's oversight in this area when we issue our product based on this work in the Fall.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO
PAUL ROTH

Question 1. New Mexico is a rural state where most areas have just one or two cell phone providers. This situation already limits consumer choices. People in rural areas with few wireless companies to choose from have even fewer options for phone handsets due to exclusivity arrangements between carriers and phone manufacturers. This exacerbates the digital divide between urban and rural areas.

With traditional wireline service, one can take any telephone to any home or office and just plug it in to make calls—no matter who the service provider is. Yet if one changes wireless carriers, one often has to buy a new phone. This seems wasteful and unnecessary. What policies will you implement that will increase the availability of smartphones to consumers, particularly those that live in rural states?

Answer. AT&T already is the industry leader in making the most innovative devices available to consumers throughout the country. We maintain this leadership in two fundamental ways. *First*, we have made significant investments to deploy one of the most ubiquitous and advanced wireless networks in the Nation. We are today able to provide service to approximately 90 percent of American consumers—whether they live in urban, suburban or rural regions of the country. That percentage will increase to approximately 95 percent once we complete our pending transactions with Centennial Wireless and Verizon Wireless (whereby we have agreed to purchase certain of Verizon Wireless's rural assets). Moreover, our 3G wireless broadband network represents the first widely available service in the world to use High Speed Packet Access technology, and it has been rated the fastest 3G network in the Nation. Our 3G footprint now includes over 350 major metropolitan areas in the U.S., including the Albuquerque metroplex.

Indeed, AT&T's commitment to providing next-generation capabilities to as many consumers as possible is evidenced in New Mexico. From 2006 to 2008, AT&T's capital investment in New Mexico was more than \$85 million, which included 102 new cell sites and 115 site upgrades to 3G service. Our 2009 expansion effort includes three new cell sites and 51 site upgrades to 3G service.¹ And, some of the assets that we are purchasing from Verizon Wireless are located in rural areas in the northwest, southwest and southeastern regions of New Mexico; once we obtain and upgrade those facilities, residents in these rural areas will enjoy the benefits of our Nation's-fastest 3G broadband service.

Second, through our collaborations with handset manufacturers, we have made available to U.S. consumers the most advanced devices in the world at distinctly affordable rates. That is, we have taken real risks and incurred enormous costs—in the form of technology development, marketing and retail discounts, just to name a few—to bring innovative devices to the marketplace. The currently most notable of these collaborations is our partnership with Apple in connection with the iPhone, which has provoked an unprecedented competitive reaction. The marketplace is now awash with next-generation devices that allow consumers to do things that no one even imagined just a year or two ago, and that cost consumers less than previous, less capable devices. The ultimate result of AT&T's investments here: AT&T is the leader in the smartphone segment, with twice as many smartphone users choosing AT&T as compared to our competitors.

In short, we intend to continue these successful strategies; in doing so, we will give our rural customers the greatest possible choice and access to the most cutting edge services and devices.

Question 2. Why should consumers be forced to purchase new phones when switching carriers?

Answer. AT&T does not force customers to purchase a new device when switching service to AT&T from a different carrier. AT&T's wireless network employs GSM technology—the global wireless standard. Because we use the global standard, we are able to support a particularly wide array of devices. Thus, while AT&T offers customers a variety of ways to sign up for service (e.g., by purchasing a handset for a discounted price and signing a one or two year agreement promising to pay a monthly fee for service), we also allow a customer to bring any GSM-capable device to our network and establish service.

¹ AT&T's U.S. capital budget is the single largest of any American company in any industry. In fact, we will spend between \$16 billion and \$17 billion in capital 2009.

The other major wireless technology used in the U.S. is CDMA (employed by, for instance, Verizon Wireless and Sprint). GSM-capable devices do not operate on CDMA networks and CDMA devices do not operate on GSM networks, including AT&T's. Thus, the only time that a new customer would be *required* to obtain a new device when signing up for service with AT&T would be if the customer has only a CDMA-capable device. Fortunately, as discussed above, AT&T makes available an industry-leading lineup of innovative devices at affordable, usually discounted prices.

Question 3. Should public policy mandate that wireless networks allow any new handset to connect to it, similar to the existing situation with wireline service since the *Carterfone* decision?

Answer. The *Carterfone* paradigm is not a relevant touchstone for today's wireless industry. As an initial technical matter, as discussed above, not every wireless device will work with every wireless network. Beyond this, the competitive environment in which wireless carriers operate today bears no similarity to the market structure for landline voice service that was central to the *Carterfone* decision. At the time of *Carterfone*, voice telephony essentially was provided by a monopoly that not only provided service, but also manufactured the phones. There was, thus, no meaningful competition that constrained the provider's practices and no demonstrable technical impediments to allowing other devices to attach to the landline telephony network. In that context, a regulatory solution arguably was appropriate.

In stark contrast, the American wireless industry of today is a model of competitive dynamism, with nine independent companies each serving more than four million retail customers. More than 95 percent of the U.S. population—those living in urban, suburban and rural America—are served by at least three competing carriers, and more than half live in areas served by at least five.² Eight years ago there were 100 million U.S. wireless customers. Today, there are more than 270 million, and in 2008 they used more than 2.2 *trillion* minutes—a tenfold increase since 2000. At the same time, prices have declined precipitously. Revenue per minute has fallen 89 percent since 1994, and U.S. wireless prices are much lower than in any other major industrialized country. And, while AT&T and Verizon are currently the two largest wireless providers, the next two largest, Sprint and T-Mobile, have a combined 82 million customers, and the carriers that round out the top 10 have another nearly 20 million customers among them. Against this backdrop, there can be no serious argument that regulatory mandates could more effectively govern this marketplace than can these powerful competitive forces.

Indeed, the true victims of the mandate suggested in the question would be consumers, as they would see less innovation, fewer choices, and significantly higher prices for wireless handsets. The U.S. model for handset development and deployment—whereby carriers and manufacturers collaborate to share the enormous risks and costs of bringing an inventive but unproven new device to market—have provided U.S. consumers the most advanced devices in the world at distinctly affordable rates; quickened the pace of technological advancement; incentivized carriers to offer even greater handset subsidies to their customers; and shifted the center of handset innovation from Europe and Asia—where it rested for years—to the United States. Now, the U.S. leads the world, with the best devices being designed and manufactured by American companies and American consumers often enjoying the earliest—and cheapest—access to them. There is no compelling argument that this wildly successful system should be scuttled through legal or regulatory fiat.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. MARK WARNER TO
JOHN E. ROONEY

Question. I understand your plight that many rural consumers cannot purchase popular handsets because they reside in areas not served by the one carrier offering the desired handset (and the one carrier typically prohibits its subscribers from using more than 40 percent of their airtime roaming on an alternative network). Your firm, and rural carriers, contend that virtually all high-end handsets are subject to exclusives, limiting access to advanced telecommunications services and creating a "digital divide" between people who can get a phone or high-end Blackberry and those who cannot.

² Contrary to the suggestion in the question, there is no lack of competition in New Mexico, which is served today by at least five competing providers: AT&T, Verizon Wireless, Sprint, T-Mobile and Plateau Wireless. While there may be pockets in New Mexico where there are relatively fewer alternatives, most consumers in New Mexico enjoy a wide variety of choices for wireless service.

I've also heard from the larger wireless carriers. They contend that, absent exclusives that guarantee volume and term commitments, manufacturers would have to devote scarce resources to marketing—an expenditure that carriers typically assume under an exclusive contract—which reduces the amount of money available to develop technologies. Is there any compromise?

Answer. To preface my answer Senator, I believe the factual statements we have provided to date concerning the difficulty that consumers have in accessing devices and the high number of handsets subject to exclusivity, are largely undisputed. The claims of other parties that manufacturers would have to devote scarce resources to marketing are largely unsubstantiated in several respects. Manufacturers such as Sony, Nokia, LG, and Samsung have plenty of resources to market their products. Does the fact that Nikon cameras are available in almost every camera store imaginable deter Nikon from marketing? Moreover, without exclusive arrangements, carriers would still market phones to consumers, as they do today. Before exclusive arrangements became the norm, carriers purchased handsets from manufacturers and marketed them to consumers under the same distribution system in effect today.

We have learned over the past several years that no workable compromise is forthcoming from the large carriers without action from Congress or the FCC. Congressional leadership on this issue has been instrumental to activating limited industry talks, however to date I am unaware that such talks have led to any meaningful progress toward industry-wide compromise. I urge you to inquire of the "Big Four" carriers for answers on where compromise might exist because to date none has been offered to U.S. Cellular. The recent unilateral action by Verizon Wireless to modify its policies amounts to crumbs for most industry participants and it does nothing to address the fundamental concerns of the 6.2 million customers we serve. We will consider any reasonable industry-wide proposal that puts these handsets in the hands of all customers that want them but we can't negotiate with ourselves.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO
JOHN E. ROONEY

Question 1. New Mexico is a rural state where most areas have just one or two cell phone providers. This situation already limits consumer choices. People in rural areas with few wireless companies to choose from have even fewer options for phone handsets due to exclusivity arrangements between carriers and phone manufacturers. This exacerbates the digital divide between urban and rural areas. With traditional wireline service, one can take any telephone to any home or office and just plug it in to make calls—no matter who the service provider is. Yet if one changes wireless carriers, one often has to buy a new phone. This seems wasteful and unnecessary. What policies will you implement that will increase the availability of smartphones to consumers, particularly those that live in rural states?

Answer. Senator, let me be clear at the outset that we don't believe that substantial new regulatory structures are needed to increase the availability of smartphones and modern telecommunications technology to consumers in rural areas. I recommend two remedies.

First, as the testimony at the Committee's June 17 hearing reflects, exclusive arrangements harm rural consumers because while rural carriers such as U.S. Cellular have competitive, and sometimes superior networks in rural areas, rural consumers oftentimes must choose between our high-quality networks and a desirable smartphone.

We compete against the four largest carriers in rural areas at a substantial disadvantage because of their enormous access to low-cost capital, their national advertising budgets, and their ability to offer the most desirable handsets. No market participant can reasonably ask regulators to level the playing field with respect to the first two factors, however the third factor is not one that has been fairly conferred in the marketplace.

Exclusive arrangements have grown solely as a result of FCC-sanctioned merger activity that has concentrated enormous power within the largest carriers, causing significant adverse effects on rural consumers. For example, until recently there were entire states, such as Vermont, where Apple's iPhone could not be used because AT&T Wireless had no facilities.

Put simply, in order for the many rural consumers to have access to the latest and most desirable devices, exclusive arrangements must be prohibited.

Our second remedy involves universal service. In 1996, Congress amended the telecommunications act to allow Federal universal service funds to be used by competitive carriers to deliver to rural consumers access to modern telecommunications

services that are reasonably comparable in quality, and at reasonably comparable prices, to those available in urban areas. As you know very well in New Mexico, there remain substantial parts of rural America where citizens' access to *high-quality* wireless networks is absent. The phone works in some places, but not others. Large dead spots remain, despite the fact that the FCC has licensed nine carriers throughout the country.

Today, we are investing in new wireless towers throughout the areas where we have become eligible to draw Federal universal service funds and as a result of our investments we have network service quality that is superior to our competitors in most of the areas where we have invested these funds.

That is potentially an enormous benefit to rural citizens. I say potentially because when Congress spoke of delivering modern telecommunications technology to rural areas, I'm certain they did not intend for our modern networks to be broadcasting wireless signals to an area where consumers cannot choose the best devices that handset manufacturers are offering in urban areas through the largest carriers. Nor did Congress intend for consumers to be forced to choose between the most desirable devices and a superior network.

In order to improve rural consumers' access to high-quality devices, Congress must ensure that wireless carriers can to build out their networks and deliver high-quality service that will make the devices useful. If handset exclusivity is prohibited, but the phone does not work well in rural areas, then the prohibition will not deliver the intended benefits.

Over the past year, some large carriers have walked away from universal service funding in rural areas. They have decided that they would rather not be obligated to deliver high-quality wireless services in rural areas, and instead construct cell sites only where it is profitable. They have the right to do that, however some of these same carriers continue to advocate for a return to monopoly-era regulatory structures that will raise barriers to competitive entry in rural areas by carriers such as U.S. Cellular. I object to these efforts. Rural citizens deserve competitive options in telecommunications services and the universal service mechanism was written with the intention of breaking down barriers to competitive entry, not erecting them.

In sum, Congress must continue to ensure that universal service funding is being used to build mobile wireless networks in rural areas where our citizens desperately need access to modern and high-quality service that they can depend on. These high-quality networks are critical to rural consumers having the ability to make useful the devices that we are attempting to make available to them.

Question 2. Why should consumers be forced to purchase new phones when switching carriers?

Answer. As a general matter, consumers should not be forced to purchase a new phone when switching carriers. Let me discuss a couple of specific limitations, however. AT&T and some other carriers use a technology called GSM. Verizon and some other carriers (including U.S. Cellular) use a technology called CDMA. In either case, a consumer can call any other phone in the world that is connected to the public switched telephone network. However a GSM phone cannot place a call when it is in an area where the only network providing signal is CDMA, and vice versa. Accordingly, for example, when an AT&T subscriber wishes to switch to Verizon, they must purchase a new handset because their GSM phone will not work on Verizon's network. I note here that there remain millions of consumers still using Nextel's I-Den network, which was acquired by Sprint some years ago and those phones do not work on either a GSM or CDMA network.

A second limitation involves software. Each carrier loads specific software into a handset to optimize it for that carrier's network. In addition, the software often-times includes applications that work solely on that carrier's networks. When a person changes carriers, the new carrier must wipe clean the software and attempt to load software that works with the new carrier's network.

When a new customer brings a device to us that is the same model as one we sell, activating it is usually achievable. However, when a person brings in a handset from a manufacturer that we do not buy handsets from, it can be difficult if not impossible to adapt that device to our network. Carriers should however be prohibited from "locking" devices such that they cannot be activated on another network even though they would otherwise function well from a technical perspective.

GSM/CDMA limitations are unfortunate, but they are primarily the result of our Nation's decision to not mandate a single standard for wireless telephony. In the future, when most networks will operate on a technology called Long Term Evolution ("LTE"), these problems will be reduced, but not eliminated. Moreover, there are today a few devices that work on both CDMA and GSM networks, however no carrier has made them active on both networks.

In an ideal world, wireless consumers would be able to plug their device into any network. Given the limitations expressed above, that ideal is not currently achievable in many circumstances. That said, it is important to note that whenever a consumer brings a compatible device to our network, we allow them to use it without purchasing a new device whenever that is technically possible.

Question 3. Should public policy mandate that wireless networks allow any new handset to connect to it, similar to the existing situation with wireline service since the *Carterfone* decision?

Answer. In light of the technical limitations set forth above, I do not believe that such a policy mandate is achievable at this time. I agree with the general proposition that a consumer should be able to purchase a device and connect it to the telephone network through their carrier of choice, as the FCC long ago decreed in the *Carterfone* decision. If you eliminate handset exclusivity and are vigilant in not allowing the largest carriers to dominate the handset supply chain, I believe you will go a long way toward improving the ability of all citizens to choose a device that best suits their needs and connect it to the telephone network on their carrier of choice.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO
ROBERT M. FRIEDEN

Question 1. New Mexico is a rural state where most areas have just one or two cell phone providers. This situation already limits consumer choices. People in rural areas with few wireless companies to choose from have even fewer options for phone handsets due to exclusivity arrangements between carriers and phone manufacturers. This exacerbates the digital divide between urban and rural areas.

With traditional wireline service, one can take any telephone to any home or office and just plug it in to make calls—no matter who the service provider is. Yet if one changes wireless carriers, one often has to buy a new phone. This seems wasteful and unnecessary. What policies should be implemented that will increase the availability of smartphones to consumers, particularly those that live in rural states?

Answer. In the United States, the vast majority of wireless subscribers acquire handsets in a transaction with a wireless carrier, or its sales agent, that combines a subsidized phone with a one or two year service commitment. This business model reduces subscriber churn by locking consumers into a multi-month service term during which time the carrier recoups its handset subsidy through monthly rates and early service termination fees. In most nations, consumers can acquire handsets through a variety of distribution channels, including the ability to take service using an existing handset. U.S. subscribers, who forego the option of acquiring a subsidized handset, do not qualify for cheaper service rates. Wireless carriers apply the same rates they charge customers using subsidized handsets on a month-to-month basis.

The top four wireless carriers have a market share of approximately 90 percent.¹ Because they combine handset sales with telephone service, these carriers also dominate the market for handset purchases directly from manufacturers. With the exception of Apple, wireless handset manufacturers have an inferior bargaining position with the major wireless carriers. The manufacturers perceive the need to ensure that they have shelf-space at the major carriers' retail outlets. Wireless manufacturers accept exclusive distribution agreements for their most attractive handsets, primarily to maintain favorable relations with a wireless carrier.

Consumers may not enjoy all the potential benefits from wireless telecommunications and information services when carriers control how subscribers acquire handsets and what services these devices can perform and access. Bundling handsets and service, and securing exclusive distribution agreements, have an adverse impact on the aggregate level of innovation in both handset design and wireless services. Carriers' interests in recouping handset subsidies and manufacturers' interests in accommodating the interests of the Big Four wireless carriers combine to restrict what subscribers can do with their handsets.

¹See Federal Communications Commission, *In re Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Thirteen Report, DA-09-54, Table A-4: Top 20 Mobile Telephone Operators by Subscribers, 138 (Jan. 16, 2009)(using 2007 data); available at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-09-54A1.pdf (2007 data). See also, Leslie Cauley, *iWeapon: AT&T Plans to Use its Exclusive iPhone Rights to Gain the Upper Hand in the Battle for Wireless Supremacy*, USA TODAY, May 22, 2007, at 1B. The top four carriers market share exceeds the FCC's 2007 calculation, because of further industry consolidation including Verizon's acquisition of Alltel.

Carriers restrict subscribers from accessing services and software applications that might reduce carrier revenues. For example, AT&T blocks subscribers from launching the Skype voice over the Internet Protocol (“VoIP”) application and using the service via the AT&T network. AT&T wants to preserve its ability to restrict international long distance calling options, thereby ensuring that most calls trigger the high rates AT&T charges subscribers as opposed to the pennies Skype would charge. Wireless carriers regularly lock out subscribers from using features already installed in handsets, or available by downloading software. For example, AT&T does not make it easy for iPhone subscribers to use their phones as a modem for accessing the Internet via another device such as a personal computer.

Wireless carriers can stifle innovation in handsets, because the carriers dominate the distribution chain for these devices. I do not believe Congress should prevent carriers from offering consumers the option of acquiring subsidized handsets. However, I do believe Congress should ensure that the FCC’s venerable *Carterfone* policy² apply to wireless carriers. Over forty years ago, the FCC determined that subscribers of wireline service had the right to attach any device, and access any service, that does not cause technical harm. This fundamental consumer freedom should also include the right to attach any wireless device to carrier networks, subject to easily managed spectrum and other technical interface issues. Wireless *Carterfone* would authorize consumers to attach any handsets and access any software application and service subject to a similar technical harm standard.

Question 2. Why should consumers be forced to purchase new phones when switching carriers?

Answer. Subscribers need to acquire new handsets when switching carriers for a number of reasons. Because U.S. wireless carriers do not all operate on the same frequencies and do not use the same transmission formats, a switch in service provider will necessitate acquisition of a new device compatible with the new carrier’s operating frequency and transmission format. For example, AT&T uses the Global System for Mobile communications (“GSM”) transmission format while Verizon uses Code Division Multiple Access, incompatible with GSM. When consumers shift between AT&T and Verizon, they will have to replace their existing handset that will not work on the replacement network.

However, the need to have a compatible handset does not absolutely obligate subscribers to acquire a new device, one that has a financial subsidy, or one exclusively available from the new carrier. A subscriber could acquire a used handset, and manufacturers could offer handsets compatible with many carriers’ networks. However, both scenarios have little likelihood of occurring in the current marketplace, because subscribers would not qualify for lower service rates if they forego the option of acquiring a subsidized, new handset. While wireless handset manufacturers do make devices that operate on different frequencies and transmission formats, so called dual-, tri- and quad-mode phones, wireless carriers do not want to offer handsets that can access the networks of competitors. Unlike the wired telephone marketplace, where subscribers can use the same phone when changing carriers, the FCC’s failure to apply the wireless *Carterfone* policy all but guarantees that subscribers will have to purchase a new phone, or have every incentive to acquire a new one even if not absolutely required by carriers to do so.

Ironically, the FCC has implemented a policy that was supposed to promote easy switching of carriers. The Commission requires both wireline and wireless carriers to support number portability,³ the right of telephone subscribers to keep an existing telephone number when switching carriers operating in the same locality. The FCC concluded that without number portability consumers would have greater reluctance to switch carriers even if doing so would qualify consumers for better rates, terms, and conditions.

²*In re Use of the Carterfone Device in Message Toll Tel. Serv.*, 13 F.C.C.2d 420 (1968), *recon. denied*, 14 F.C.C.2d 571 (1968). See also, Rob Frieden, *Wireless Carterfone—A Long Overdue Policy Promoting Consumer Choice and Competition* (New Am. Found., Wireless Future Program, Working Paper No. 20), available at http://www.newamerica.net/files/Wireless_Carterfone_Frieden.pdf. Rob Frieden, *Hold the Phone: Assessing the Rights of Wireless Handset Owners and Carriers*, 69 U. PITT. L. REV. 675, 720–25 (2008).

³“Local number portability (LNP) refers to the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers when switching from one telecommunications carrier to another. Thus, subscribers can port [i.e., interconnect and hand off traffic] numbers between two CMRS carriers (intramodal porting) or between a CMRS and wireline carrier (intermodal porting).” Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Eleventh Report, 21 FCC Rd. 10947, 11005 (2006).

Question 3. Should public policy mandate that wireless carriers comply with the *Carterfone* policy?

Answer. I believe that the FCC's implementation of its longstanding *Carterfone* policy for wireless carriers would stimulate innovation and create market-driven incentives for carriers to promote network accessibility, both in terms of handset access and subscribers' opportunities to download software applications. Wireless devices, such as smartphones, have become the functional equivalent to personal computers. Personal computer users rightly assume that they have an unfettered right to attach their devices to any network and to download any type of legal software and content. Senators and Representatives would hear from many constituents if computer manufacturers, or Internet access providers tried to stifle such freedom. Yet currently wireless carriers can do just that. Computer users have access to millions of software applications and services, not the 30,000 selected jointly by Apple and AT&T.

Requiring the FCC to apply its *Carterfone* policy to wireless carriers would not impose new regulations and costly burdens. The policy remedies carriers abuses that have worked to lock out innovations and stifle consumer freedom.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO
BARBARA S. ESBIN

Question 1. New Mexico is a rural state where most areas have just one or two cell phone providers. This situation already limits consumer choices. People in rural areas with few wireless companies to choose from have even fewer options for phone handsets due to exclusivity arrangements between carriers and phone manufacturers. This exacerbates the digital divide between urban and rural areas.

With traditional wireline service, one can take any telephone to any home or office and just plug it in to make calls—no matter who the service provider is. Yet if one changes wireless carriers, one often has to buy a new phone. This seems wasteful and unnecessary.

What policies should be implemented that will increase the availability of smartphones to consumers, particularly those that live in rural states? Why should consumers be forced to purchase new phones when switching carriers? Should public policy mandate that wireless networks allow any new handset to connect to it, similar to the existing situation with wireline service since the *Carterfone* decision? What policies should be implemented that will increase the availability of smartphones to consumers, particularly those that live in rural states?

Answer. For the most part, we currently have the correct public policies in place to ensure the timely diffusion of smartphones to consumers, including those that live in rural states. Although exclusive handset arrangements between some wireless service providers and some handset manufacturers may mean that residents of some areas do not have immediate access to a particular handset, that does not mean that they are bereft of adequate choices of service plans and equipment. Today there are numerous vendors of smartphones, and many types and models of these handsets. Thus, there is less an unbridgeable "digital divide" between urban and rural areas, than there is a lag in diffusion of certain technologies and equipment. This lag is due in part to the economic characteristics of serving sparsely populated areas, in part to the duration of exclusivity arrangements, and in part to other factors, include the size of the provider's customer base and the type of wireless broadband network offered by the provider. It is not different, in essence, from the lack of availability in rural areas of products and services typically found in densely populated urban areas.

Prohibiting exclusive handset arrangements, as some rural carriers have requested, might speed the availability of some current generation of smartphones to some rural subscribers in the short term, but it would do so at a cost. Such a policy, by effectively mandating that handset manufacturers must design their products for use on all wireless networks, would mean that wireless service providers can no longer differentiate themselves and compete on the basis of handset offerings. Over the long term, this would lessen competition to design and market the next "hot" handset. No one company or carrier has a monopoly on innovation, and there is nothing to prevent smaller and rural carriers from forming a buying consortium of sufficient scale to contract with handset manufacturers to produce innovative products. In fact, at least one such group exists, and rural carriers have through it successfully developed and marketed such exclusive products in the past.

Industry-led solutions to this problem are far more likely to provide consumer benefits than regulatory mandates. For example, by acting together, a group of 24 small wireless providers last year negotiated directly with Verizon Wireless for ac-

cess to handsets exclusive to that carrier. More recently, Verizon Wireless has announced that “for small wireless carriers (those with 500,000 customers or less), any new exclusivity arrangement [it] enter[s] with handset makers will last no longer than 6 months—for *all* manufacturers and *all* devices.” The carrier has also indicated that it will negotiate similar arrangements for larger, regional carriers on an individual basis. There is obviously a calculation made by the carrier and the handset manufacture as to the length of the exclusivity period necessary for each to earn the benefit of the risk and investment involved in bringing the device to market. A similar balancing of interests has been recognized by T-Mobile USA, according to Kathleen Ham, VP of Regulatory Affairs, who has stated that the carrier “for the most part utilizes limited exclusivity arrangements that don’t apply to the smallest carriers, but do incent us to invest, innovate and provide an alternative wireless experience to our consumers.” Calculations concerning the size of carrier against whom the exclusivity arrangement will apply and length of time required to recoup the value of the investment in the subject device will necessarily differ among the wireless carriers, who, together with the handset manufacturers, are in the best position to make such determinations for any given device.

Market-based solutions such as these are preferable to regulatory prohibitions on the exclusive arrangements because they preserve the wider societal benefits of such arrangements—intense competition between the largest carriers and handset manufacturers to develop the next “must have” device—while speeding the availability of more advanced handsets to customers living in rural areas served by regional and smaller competitors. Public policy should encourage such industry-led solutions by saving the use of regulatory intervention for cases of demonstrable market failure and consumer harm.

Question 2. Why should consumers be forced to purchase new phones when switching carriers?

Answer. Unlike in Europe, where a single wireless interface technology—GSM—is employed, in the U.S. there are two predominant technologies used by wireless carriers: CDMA2000 and GSM. As a result, not every handset is designed to work on every network. The Apple iPhone, for example, was designed to work with a GSM network and cannot function on a CDMA2000 system. Thus, a subscriber switching from a GSM carrier to a CDMA carrier will have to purchase new equipment that is compatible with that carrier’s network.

Additionally, wireless network operations reflect not only technology choices (CDMA vs. GSM), but also spectrum band utilization differences (cellular vs. PCS), together with individual service and feature choices by the operator. In these respects, wireless handsets are unlike traditional landline phones. They are optimized for use on a given provider’s network and designed to work on the spectrum that provider has available and the features and services that provider offers. For example, wireless providers have made various choices for provisioning E911 service, and the handset must be compliant with that choice to ensure the effective operation of the E911 service.

Question 3. Should public policy mandate that wireless networks allow any new handset to connect to it, similar to the existing situation with wireline service since the *Carterfone* decision?

Answer. As stated above, there are two predominant spectrum interface technologies used by U.S. wireless carriers: CDMA and GSM. Given this, a public policy mandate that wireless networks allow any new handset to connect to it would be impractical, if not impossible to implement without additional changes to the design of many wireless handsets. More importantly, imposition of *Carterphone*-like rules would require a radical shift for the wireless industry. *Carterphone* requires a standardized network, whereas the Federal Communications Commission has encouraged technology diversity among wireless networks in recognition that it is pro-competitive, pro-innovation and beneficial to consumers.

Nor do market conditions warrant such a radical departure from established policy. The market conditions giving rise to the FCC’s *Carterphone* decision couldn’t be more different than those of the wireless market today. The *Carterphone* decision was rendered at a time when telecommunications services were provided on a monopoly basis by a landline telephone provider and the telephone monopoly was also vertically integrated in the telephone equipment business. Since 1992, when there were only two cellular carriers per market, the FCC has permitted wireless carriers to control the devices attached to their networks and offer bundled transmission and equipment services in recognition of the fact that the wireless handset market was vibrantly competitive and the wireless carrier market sufficiently competitive that bundling service and equipment would benefit, rather than harm, consumers. And the market today is even more intensely competitive with 95.5 percent of the popu-

lation of the U.S. living in areas served by three or more commercial mobile radio service providers and hundreds of handsets available from other 30 handset manufacturers. Significantly, wireless service providers do not own and are not otherwise vertically integrated with handset manufacturers. Since 1992, we have seen a steady trend of rising wireless minutes of use, a steady decrease in wireless service prices, and a steady increase in wireless service and equipment offerings. These are the indicators of a healthy and competitive market, where no single provider has and is abusing market power, rather than a failed market.

Thus, from the perspective of economic theory, the competitiveness of the U.S. wireless market does not justify *Carterphone*-like regulation. Moreover, the goal of the *Carterphone* requirements was to introduce innovation in the consumer premises equipment market by permitting third-party manufacturers entry: a goal already achieved many times over by today's flourishing wireless handset market.

This is not to suggest that wireless carriers should be free to impose any and all restrictions on equipment suppliers, application providers and end user customers, but it does suggest that calls for legislative and/or regulatory intervention be tested to determine if in fact, particular carrier practices are on balance anticompetitive and that consumers will be better served by before-the-fact regulation. Markets may be inefficient and imperfect in some respects, but regulation can be more so. Accordingly, in the absence of demonstrable consumer harms, regulatory intervention into effectively functioning markets should not be undertaken lightly and must rest on solid empirical evidence, rather than supposition or surmise. It is doubtful that such a factual basis for regulatory intervention into the wireless service market exists today.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO
VICTOR H. "HU" MEENA

Question 1. New Mexico is a rural state where most areas have just one or two cell phone providers. This situation already limits consumer choices. People in rural areas with few wireless companies to choose from have even fewer options for phone handsets due to exclusivity arrangements between carriers and phone manufacturers. This exacerbates the digital divide between urban and rural areas.

With traditional wireline service, one can take any telephone to any home or office and just plug it in to make calls—no matter who the service provider is. Yet if one changes wireless carriers, one often has to buy a new phone. This seems wasteful and unnecessary. What policies will you implement that will increase the availability of smartphones to consumers, particularly those that live in rural states?

Answer. Cellular South currently serves large portions of rural areas in all or part of five southeastern states. We are proud of our history of serving these areas with the philosophy of providing rural Americans with the same types of wireless services as those that are enjoyed by Americans in urban areas.

Consumers in rural portions of Cellular South's service area have access to the same devices as consumers in other portions of our service area. Unfortunately, device exclusivity agreements limit the Smartphones and PDAs that we can provide to our customers.

In many rural areas, Cellular South provides the most reliable and robust wireless service. Consumers in these areas often have to choose between having a device from Cellular South that works when and where they need it, or having a cutting-edge device offered exclusively through another carrier that does not always have coverage where the customer needs it.

Question 2. Why should consumers be forced to purchase new phones when switching carriers?

Answer. Cellular South believes that a consumer should have the ability to switch carriers without having to purchase a new device. Unfortunately, differences in technology can make this legitimately impossible today when a consumer switches between CDMA and GSM carriers. However, today's consumers should be allowed to use their existing devices when switching between carriers that utilize the same technology.

When the largest carriers get exclusive agreements for devices, they typically "lock" those devices to their networks so that they cannot be used on other technologically-compatible networks. In most cases, consumers cannot "unlock" these devices without taking steps that will void the device's warranty.

It is important to address this problem now because, as carriers deploy 4G technologies, the early indications are that most will choose LTE as their 4G technology. This will result in a common platform for most carriers which will allow the poten-

tial for customers of these carriers to move their device from one network to another more freely than they are able to do today.

Question 3. Should public policy mandate that wireless networks allow any new handset to connect to it, similar to the existing situation with wireline service since the *Carterfone* decision?

Answer. Cellular South believes that a consumer should be able to attach an FCC-certified wireless device to the wireless network of his or her choice, provided that the device does not harm the network. There is no compelling reason why consumers should be forced to buy wireless devices through wireless service providers. In fact, Cellular South would welcome an environment where wireless providers simply provide service and are not also device suppliers.

While it may be some time before U.S. wireless consumers buy devices separately from wireless providers, Congress could make significant progress in this area by eliminating the use of exclusivity agreements between wireless device manufacturers and wireless service providers.

