The Wireless Landscape

Kansas SITA
50th Anniversary Meeting
Tony Veach
Bennet & Bennet, PLLC
Monday, July 18, 2011

“The world is going mobile”

“There are 300 million mobile subscribers in the U.S., and 90% of us keep our mobile device in arms length 24 hours a day. Smartphone sales have eclipsed PC sales. Mobile broadband is being adopted faster than any computing platform in history.”

-Chairman Genachowski, TIA Dallas 2011

USF Reform

National Broadband Plan
• NOI – April 2010
• NPRM – February 2011
  – Comments and Reply Comments Filed
  – Ex Parte/Lobbying Period

“The world is going mobile”

“Farmers can track weather or commodity prices in real time using mobile broadband. I was in Nebraska yesterday, and I can tell you that farmers and hunters who a few years ago may have assumed that the Internet wasn’t going affect their lives are now insisting on high-speed broadband access.”

USF Reform

Wireless – Short Term Proposals
Elimination of the Identical Support Rule
• Under the Commission’s identical support rule, competitive ETCs (mostly wireless carriers) receive support, subject to an interim cap, regardless of actual costs or needs, as a per-line, dollar-for-dollar match with the incumbent wireline carrier support per line in the same area.
USF Reform

Wireless – Short Term Proposals

Competitive CETCs
• Interim cap for CETCs is $1.36 billion.
• In 2010: 446 CETCs received funding under the identical support rule.
• CETCs received approximately $2.65 per supported line per month (compared to an average of $3.35 per supported line per month for incumbents).

Elimination of the Identical Support Rule
• Reduce the interim cap on competitive ETCs support in five equal installments, with the initial 20 percent reduction to occur in 2012.
• Transition CETC support to CAF
• Possibility of waivers

USF Reform

Wireless Short-Term Proposals

Phase I – “Fast Track”
• Nonrecurring, targeted support for new construction of broadband networks in unserved areas
• $500 million to more than $1 billion.
• Build-out and service requirements
• Wireline or Wireless

• Should the CAF support one fixed and one mobile provider per area?
• Situations where no carrier is willing to provide service in a particular area?
• What about areas where a carrier is providing service without USF support?

USF Reform

Long Term Proposals

• Distribute all ongoing support through the CAF, while keeping the size of the new fund equal to the level of the high-cost fund in 2010.
• CAF funding would replace all explicit support as well as all implicit subsidies from intercarrier compensation rates.

• Distribute all ongoing support through the CAF, while keeping the size of the new fund equal to the level of the high-cost fund in 2010.
• CAF funding would replace all explicit support as well as all implicit subsidies from intercarrier compensation rates.
USF Reform
Long Term Proposals

Wireless Support

- Cost Model
- Reverse Auction

USF Reform
Mobility Fund

- Wireless Only
- One-time support for deployment of 3G networks to bring all states to a minimum level of 3G availability and improve the business case for the rollout of 4G
- $100 - $300 million
- Reverse Auction process

USF Reform
What’s Next?

- Order
- Contributions NPRM
- Rural Association Plan
- Industry-Wide Plan

Wireless Competition Report


- Did not reach an overall conclusion regarding whether or not the wireless marketplace was effectively competitive.


- Makes no formal finding as to whether there is, or is not, effective competition in the industry.
**Wireless Competition Report**

### Wireless Voice Coverage

1 Provider: 99.8% Pops – (76.3% Square Miles)
2 Providers: 99.2% Pops – (63.6% Square Miles)
3 Providers: 97.2% Pops – (50.2% Square Miles)
4 Providers: 94.3% Pops – (36.2% Square Miles)
5 Providers: 89.6% Pops – (24.3% Square Miles)
6 Providers: 76.4% Pops – (13.7% Square Miles)
7 Providers: 27.1% Pops – (4.5% Square Miles)

---

### Mobile "Broadband" Coverage

1 Provider: 98.5% Pops – (59.4% Square Miles)
2 Providers: 91.9% Pops – (32.9% Square Miles)
3 Providers: 81.7% Pops – (13.5% Square Miles)
4 Providers: 67.8% Pops – (5.6% Square Miles)

---

**Wireless Competition Report**

### Mobile Wireless Market Concentration

Herfindahl-Hirschman Index (HHI): the sum of the squared market shares of all firms in any given market – used to measure industry concentration by U.S. Antitrust Authorities:
- Unconcentrated (HHI < 1500),
- Moderately Concentrated (1500 < HHI < 2500)
- Highly Concentrated (HHI > 2500)

---

**Wireless Competition Report**

### Mobile Wireless Market Concentration

HHI:
- End of 2008: 2842
- End of 2009: 2811
- Mid-2010: 2848

---

**Wireless Competition Report**

### Mobile Wireless Market Concentration

- HHI measures "concentration"
- Does not measure "competition"

UK: 2220
Germany: 2840
Italy: 2910
Canada: 3090
France: 3340

---

**Wireless Competition Report**

### Mobile Wireless Market Concentration

Voice and Data Revenue
Total ARPU $45.85 (declined 3% $47.09)
Voice ARPU $33.54 (declined 9% $36.98)

Total data service ARPU rose 22 percent from $10.11 in 2008 to $12.30 in 2009, and accounted for 27 percent of ARPU in 2009.
Wireless Competition Report

Urban Rural Comparison
- Just over 500,000 people in rural areas had no mobile wireless coverage as of July 2010.
- Approximately 3.8 million had no mobile broadband coverage as of August 2010.

Wireless Competition Report

Mobile Broadband Service:
82 percent of the total U.S. population is covered by three or more mobile broadband provider networks, compared to just 38 percent of the rural population.

Wireless Competition Report

Backhaul:
Wireless providers must have access to sufficient backhaul, in terms of capacity and speed, to avoid creating a communications bottleneck. Increased wireless data use requires increased backhaul capacity.

AT&T / T-Mobile

Background:
- Announced March 20, 2011.
- Combines #2 AT&T (97 million subs) with #4 T-Mobile (34 million subs).
- Creates nationwide GSM monopoly.
Background:
- 35,000+ comments filed with FCC. Over 140+ Petitions to Deny the merger filed with FCC.
- According to Advertising Age, between June 8 and June 21, AT&T spent $7.45M on television ads promoting the merger.

AT&T’s Rationale
- AT&T is running out of spectrum and faces capacity constraints.
- T-Mobile is incapable of launching LTE (despite it having a nationwide 4G HSPA+ 21/42 network).

The FACTS:
- AT&T and Verizon will control nearly 80% of the market.
- AT&T will control over 99% of the GSM marketplace and have a stranglehold on international GSM roaming domestic GSM roaming, and all SIM-based MVNO and M2M markets.
AT&T/T-Mobile Merger

The FACTS:

• AT&T has shed over 107,000 jobs since it “re-formed” back in 2004; has consistently shed jobs after major acquisitions.

• AT&T has provided financial support to organizations and politicians giving public support for the merger.

AT&T / T-Mobile

AT&T spent $7.45M on television ads promoting the merger in June.
Lobbying: $6.8 million in Jan-Mar 2011
Public Interest Groups: GLADD
State Governors

Data Roaming

1981 – Cellular Service Rules
- Manual Roaming Requirements
1996 – Broadband PCS and Specialized Mobile Radio
- Manual Roaming Requirements
2007 – Report and Order
- Automatic Roaming is a Common Carrier Obligation

April of 2011 – Second Report and Order
FCC releases an Order adopting a rule requiring wireless carriers offer data roaming arrangements to other carriers on commercially reasonable terms and conditions, subject to certain limitations.

• Supported by an overwhelming majority of commenters, two nationwide service providers, numerous consumer interest organizations and carrier associations and various equipment and software manufacturers.
• Opposed by AT&T and VZW
Data Roaming

• Carriers are required to provide commercially reasonable data roaming to other carriers, subject to certain specific limitations.
• Applies to all facilities-based providers of Commercial Mobile Data Services (CMDS), a newly defined term.

Data Roaming

Commercial Mobile Data Services (CMDS)

Any mobile data service that is not interconnected with the public switched network but is:
1) provided for profit; and
2) available to the public or to such classes of eligible users as to be effectively available to the public.

*CMRS, MSS/ATC, Wholesalers, technology, device

Data Roaming

Limitations

(1) Providers may negotiate the terms and conditions of their data roaming agreements on an individualized basis and do not have to offer the same or standardized terms.

Data Roaming

Limitations

(2) Providers are deemed to be acting in a commercially reasonable manner and therefore may refrain from offering data roaming to a requesting party that is not technologically compatible.

Data Roaming

Limitations

(3) Providers are acting in a commercially reasonable manner when refusing data roaming when it is not technically feasible and when any changes to the provider’s network necessary to accommodate roaming are “not economically reasonable.”
Data Roaming Limitations

(4) Providers are deemed to be acting in a commercially reasonable manner if they condition a data roaming agreement on the requesting carrier being capable of providing data services, including data rates at a similar “generation” of mobile wireless technology to that of the host provider, to its own customers.

Data Roaming Safeguards Against Congestion

Perhaps the strongest protection of host providers in the Second Report and Order is the ability to negotiate commercially reasonable measures that safeguard quality of service against network congestion that may result from roaming traffic or to prevent harm to their networks.

Data Roaming Dispute Resolution

It is in the public interest to establish a complaint process similar to the complaint process available under the current roaming obligations.

- informal complaint under the FCC Part I, Subpart E rules.
- Petition for declaratory ruling under Section 1.2 of the FCC's rules.

Data Roaming Dispute Resolution Negotiations – Impasse

Both parties to provide the FCC with their best and final offers that were presented during the negotiation. FCC can order parties to enter into a data roaming agreement pursuant to the terms of the complainant’s commercially reasonable final offer or to otherwise rely on the submitted offer in determining an appropriate remedy.

Data Roaming Dispute Resolution Determination of Commercial Reasonableness

- Whether the host provider has responded to the request for negotiation and has demonstrated a pattern of stonewalling, and the time since the initial request;
- Whether the terms and conditions offered by the host provider are so unreasonable as to be tantamount to a refusal to offer a data roaming arrangement;

Data Roaming Verizon Wireless Appeal

- FCC has exceeded its authority
- Data roaming rules are not needed
### 700 MHz D Block and Interoperability

10th Anniversary of September 11, 2001 is drawing near; pronounced desire in Congress to get more spectrum to Public Safety by this date.

D Block Reallocation contingent, led by Sen. Jay Rockefeller (D-WV) seems to be winning the day over D Block Re-Auction promoters, led by House GOP.

Update: Likely compromise on eventual D Block reallocation if comprehensive budget/debt-ceiling legislation has bipartisan tie-ins (e.g., full 700 MHz interoperability, incentive auctions, non-communications debt reductions, etc.).

---

### Questions and Discussion

Tony Veach
tveach@bennetlaw.com
202.551.0016