



# Expanding Wireless Broadband Services and Increasing Wireless Competition

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# Snapshot of US Cellular

- Today: US Cellular
  - Serves 6.2 million subscribers in regional clusters
  - Serves large rural areas as well as some major metro areas
  - Provides award-winning service quality
  - Has extensive broadband deployment
  
- Future: US Cellular intends to be
  - A strong wireless competitor
  - Offering leading broadband services
  - Across a regional footprint
  
- FCC Actions needed for US Cellular to continue expanding its broadband services coverage
  - USF support including broadband
  - Data roaming for 3G and 4G
  - Other key enablers — access to advanced handsets, additional spectrum, reduced special access charges





# 1. Allowing USF for Broadband Wireless Services

- With USF support for voice services, US Cellular deployed cell towers to areas that lacked quality wireless voice service. Examples of new towers for unserved areas in 2009:
  - Iowa (Leando, Whittmore, Union, Green Bay, Akron, Ocheyedon)
  - Missouri (Rover, Sunnyview, Wyaconda, Chestnut Ridge, Dove Mountain, Cassville)
  - Nebraska (Grant, Pierce West, Snyder, Spalding, Chambers, Pleasanton, Franklin, Eustis, Leigh, Burr Crab Orchard)
  - Oregon (Bonanza, Malin, Hillcrest, Spray, Kings Spring)
- US Cellular has 3G coverage enabled on about 60% of its cell sites, reaching about 75% of its post-pay customers.
  - Broadband coverage to many previously unserved and underserved areas.
- Seeking solutions for broadband in remote areas.
  - Applied for ARRA grants for additional broadband deployments in California, Kansas, Missouri and Nebraska.

## **FCC Action: Expand USF to support mobile broadband infrastructure in unserved and underserved areas**

- Mobile broadband services face higher operating and capital costs in remote areas
- Cost effective to support broadband along with voice builds and operations
- USF mechanism should be competitively and technologically neutral
  - Competition among rural wireless providers increases service quality and decreases prices – consumer choices
  - Portable support mechanisms reward carriers that consumers prefer
  - Do not adopt single-recipient mechanisms
    - Empower consumers with choice of carriers
    - Promote competition

## 2. Automatic Roaming for Broadband Data Services

- Consumers expect every function and application in their devices to work everywhere
  - Consumers want mobile Internet access nationwide, which regional carriers can offer only through reasonable data roaming with national carriers.
    - Today, 3G data experience not available via roaming.
  - Safety and economic benefits of data roaming.
  - Roaming is a desirable form of network neutrality for subscribers of regional carriers.
    - Remove geographic limitation on access to content, applications and Internet.
  - Broadband data roaming is feasible and implemented with foreign carriers

## **FCC Action: Expand automatic roaming to include all 3G and 4G data services**

- FCC correctly required wireless carriers to offer automatic voice and SMS roaming on reasonable terms and conditions.
- FCC has authority over wireless broadband services.
- Without data roaming for 2G, 3G and 4G, competitive playing field heavily tilted in favor of national carriers.
  - Empower consumers to choose regional carriers offering competitive services.

### 3. Access to Advanced Handset Technologies and Applications

Exclusivity agreements clearly overly broad, and not justified by any benefits to innovation or competition

- Minimal carrier contributions to handset innovation in design and network capabilities
  - French Competition Agency and Appellate Court (Feb. 4, 2009): “In less than 5 months and solely based on the 3G iPhone models, Orange generated a net profit of approximately Euros 140 million, measured against relevant investments of Euros 16.5 million for the two models. Consequently, the 5 year long exclusivity period is grossly disproportionate to the relevant investments made by Orange.”
  - iPhone non-exclusive in UK, Italy, France, Australia, China, Austria and many other countries
- Restrictions extend to rural areas where the exclusive carrier provides no or poor service
- Restrictions extend to mid-sized and small carriers
  - AT&T and Verizon Wireless state that they develop rate plans, features, and prices in response to the plans offered by the other national carriers. Yet, the dominant carriers also deny advanced handsets to regional carriers.
- Exclusivity typically expires long after handset has lost consumer interest, preventing competitors from accessing “cutting edge” handsets

# Harms from Handset Exclusivity

- Harms to consumers in many rural areas and nationwide
  - No access to attractive applications in many rural areas
  - Consumers forced to forego mid-sized and smaller carriers (which may offer higher network quality and lower prices) in order to obtain advanced handsets
  - Erects barrier to entry, growth, and competition from regional carriers
    - Causes higher subscriber churn for regional carriers and raises their costs (US Cellular: 1.7% churn in 2Q09, compared to 1.4% in 2Q08 and 2Q07)
  - Consumers suffer from overloaded networks of exclusive carriers
- Verizon Wireless' "commitment" (July 17, 2009) does not go far enough
  - Should cover all regional carriers (including US Cellular, Cellular South, MetroPCS and Leap) without an exclusivity period
  - AT&T and other carriers must drop exclusives
- FCC Action: Broad support for FCC rulemaking in response to RCA Petition (RM-11497)
  - Promotes broadband services, improves access to applications and content, and empowers consumers



## Obtaining Access to LTE Equipment for Key Bands

- Different spectrum bands require some customization of LTE equipment
- Manufacturers are focusing on the bands dominated by Verizon Wireless and AT&T with high volume orders
- LTE standards group (3GPP) defined Band Class 12, which includes 700 MHz lower A, B and C Blocks.
  - Then, AT&T successfully pushed for a Band Class 17 covering only Lower 700 MHz B and C Blocks (with licenses it acquired), and issued RFPs that exclude Lower 700 MHz A Block.
  - Low incremental cost for filters supporting all three blocks. Band Class 12 would enable competitive use of Lower A Block.
- FCC Action: Commence rulemaking in response to petition of 700 MHz Block A Good Faith Purchasers Alliance (9/29/09)
  - Repeat for 700 MHz successful rules prohibiting cellular equipment from operating over only portion of licensed spectrum (Section 22.902(e))

## 4. Obtaining Spectrum for Broadband Services, Including Shared Commercial Use of the 700 MHz PSBL and D Blocks through Public/Private Partnerships

- Carriers – especially regional operators – need more spectrum for efficient, widespread, competitive 4G services
  - FCC Actions: Spectrum caps and small license areas
- Two policy goals compel prompt action on Upper 700 MHz D Block
  - Provide public safety entities with nationwide, interoperable broadband wireless services.
  - Expand competitive broadband wireless services for consumers nationwide.
- Proposals made by US Cellular and others have many solid features
  - Public/private partnership will fund the network and effectively use spectrum in PSBL and D Blocks.
  - Shared capacity and technical standards address needs of public safety and commercial users.
  - With clear technical requirements and regional licenses, the D Block licenses will attract bidders. If there are areas without commercial bidders, licenses would be won by the PSBL on a zero-bid, best efforts basis.



# FCC Should Develop Auction Rules Within the Current Statutory Framework for D Block

- FCC should not wait for legislation; instead, it should take a “parallel path” approach
  - Depending on the details, USCC is not opposed to legislative solutions with shared commercial use; but, passage is uncertain and delays are likely.
  - Path forward is available within existing FCC authority that will put Upper 700 MHz D Block spectrum in service sooner, permit early builds, and facilitate nationwide public safety broadband services.
  - If legislation changes the framework, FCC can readily adapt rules. If that doesn't happen, FCC must be ready to move forward with an auction
- FCC Action: Develop rules for successful re-auction of D Block
  - Auction with second stage and zero, best efforts bids by PSBL to promote nationwide coverage.
- FCC Action: Grant limited waivers for qualified test-bed builds on PSBL spectrum within framework for nationwide services
  - Waivers should not undermine policy of widespread coverage.
  - After licensing D Block, early builders could continue operations in PSBL spectrum or combine with applicable D Block licensees.

## 5. Reducing Special Access Charges

- Reducing special access charges from ILECs will enable wireless carriers to expand competitive broadband services
  - Backhaul is large operating expense
  - Special access charges divert funds from network expansion and broadband upgrades
- Significant cost driver for regional wireless carriers
- “Middle mile” and “second mile” lack competitive alternatives in most areas
- FCC Actions:
  - Promptly conclude preliminary proceedings (impact on broadband, framework for analysis, and data collection)
  - Replace the pricing flexibility “competitive triggers” with focus on user locations
  - Lower current special access charges
  - Address anticompetitive terms and conditions on existing discount plans