Freedom. Innovation.

Discussion of AWS-3 Auction Design

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Presented by M2Z Management

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Solution: Free Service Requirement

Auctioning AWS-3 with a free service requirement would help connect millions of Americans

- **The AWS-3 licensee <u>must</u> deliver free broadband data service:**
  - » To 20M people in the US
    - With intermediate milestones that are consistent with the overall network build-out requirement
    - Geographically distributed pro-rata, on a state by state level, to the USF low cost program
  - » A basic tier service at 768kbps download speed
    - Consumer Internet broadband service comparable to DSL and cable broadband
  - » Built out to (and thus, available to) 95% of the US population over 10 years with an intermediate milestone of 50% of US pops in 5 years
- **The service would comply with the open access, open device provisions**
  - » This means that any CPE device that is compliant with the network's technical specifications will be able access the free service

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Impact of the Free Requirement

Based on the AWS3 record, a free service requirement on the AWS3 license would generate over $18B (NPV) in direct consumer benefits

		NPV of Impact Low	NPV of Impact High
For Consumers of the Free Service	• Direct benefit of broadband connectivity to consumers who aren't connected (Wilkie)	$5B	$12B
Increased Competition from a New Entrant	• Impact to all Americans from increased competition (lower prices and higher availability) (Wilkie)	$13B	$13B
Total Impact (excluding impact on USF)		**$18B** -	**$25B**

•***A free basic tier broadband service would also dramatically reduce the costs of an expanded USF Low Income Program***

Note: Wilkie (2007) and Rosston /Wallsten (2006) papers submitted in WTB 07-195,07-16 and 07-30;

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Auction of AWS-3

AWS-3 is a unique band that doesn't have any comparables

- Largest nationwide unpaired block of spectrum
- Overwhelming support in the record for progressive and significant public interest obligations (build-out requirements)
- If assigned nationally, enables direct competition to established broadband competitors generating up to $13 billion in direct consumer benefits.

Nationwide licensing makes FCC Auction design uncomplicated

- Single item bidding
- Short filing windows and rapid licensing
- Limited opportunity for collusive behavior and signaling

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FCC Auction Reserve Prices Matter

Artificially high Reserve Prices or MOBs have led to failed auctions when dealing with unique spectrum

- "D" Block (revenue target created high reserve price incongruent with policy objectives)
- 2002 Lower 700 MHz auctions (large blocks of spectrum remained in FCC inventory due to initial reserve prices that underestimated the impact of broadcast TV encumbrances)

Using low MOB or Reserve Prices allows eligible participants to establish the market clearing price

- Encourages broad based participation within the eligible class
- Encourages price discovery and helps avoid "winner's curse"
- Avoids the need to use mechanisms designed to encourage participation but end up distorting economic value (e.g., installment payments in PCS "C" Block auctions)

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Pro-competition Auction Eligibility Rules Matters

Enabling new broadband entrants is a national objective and policy priority

- Spectrum is the only viable way to create a new nationwide broadband entrant
- Despite 150 MHz of broadband spectrum being auctioned between 2006-2008, no new nationwide competitors were able to enter the market
- A new un-affiliated nationwide entrant would generate over $13B in direct consumer benefit to all Americans (through lower prices and higher broadband availability)

Blocking incumbents from participating reduces pricing distortions and creates better market structure

- Incumbents bid on the basis "foreclosure" value vs. economic value (see DOJ and NTIA comments to the FCC's National Broadband Plan) which inhibits new entry and distorts the auction process
- Spectrum warehousing by incumbents generates no consumer benefit and limits competition

Meets statutory requirement to avoid having a "concentration of licenses"

- Nearly all licenses from the AWS-1 and 2008 700Mhz auctions went to incumbents

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Recommendations

Reserve price or MOB: $0.005 per MHz-POP

- FCC precedent for unique bands
- Examples are lower 700 MHz (2002), 1.4 GHz (2007), residual 2.5 GHz (2009)

Eligibility Restrictions: Exclude all existing commercial wireless licensees (terrestrial and satellite)

- Spectrum caps for AWS-3 would not address foreclosure problem
- National licensing and the high level of vertical and horizontal integration among incumbents requires a bright line test in order to promote new competitive entry.
- Canadian AWS-1 demonstrates the success of designating spectrum for new entrants. US PCS auctions required 2/3 of all spectrum in each market to go to new entrants.

Geographic Block: Single nationwide license

- Technically appropriate due to interference management
- Reduces post-auction aggregation costs and delays associated with assembling national footprint (e.g., PCS, BRS, SMR, WCS)
- Immediate scale in correlated markets such as CPE and applications and consistent with open platform mandate

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