



Incentive Auction Report

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Overview

- Auction review
- Results
- Repacking plan



Auction Description

- Goal - Repurpose maximum amount of UHF spectrum while providing for a healthy broadcast industry
- Separate “reverse” and “forward” auctions
 - Reverse auction – Recover spectrum from TV service
 - Full power and Class A stations volunteered to go dark or change band for a price
 - FCC established high opening round prices/as auction progressed offered prices decreased
 - Forward auction – Distribute recovered spectrum to wireless carriers
 - Carriers bid for spectrum in auction with increasing prices
 - Spectrum offered in 5 MHz pairs in PEAs (Partial Economic Areas)

Auction Description



- Forward auction – Sold 5x5 MHz spectrum blocks in “PEAs” (“Partial Economic Areas”)
 - 416 PEAs
 - Derived from Bureau of Economic Analysis’s “Economic Areas”
 - Economic Areas – One or more economic nodes and surrounding counties
 - So PEAs are county based; also closely fit many wireless providers existing footprints
 - 5 MHz PEA blocks do not match 6 MHz TV channels
 - Leaves portions of recovered spectrum unused

Auction Description

- Forward and reverse auctions conducted in series of “stages”
 - Each stage consisted of a reverse auction and a forward auction for a fixed amount of spectrum (“clearing target”)
 - Reverse auction ended when all stations had dropped out, were provisionally bought, or were not needed
 - Forward auction ended when bidding stopped
 - Auction to end if proceeds of forward auction covered auction costs and meet competitive price level standard (“final stage rule”)
 - If final stage rule not met, started a new stage with lower clearing target

Auction Timeline

- Auction began March 29, 2016 (date stations committed to participate)
 - No information on how many or which stations participated (figure most did)
- Initial clearing target set at 126 MHz
 - 21 channels (30-51 less 37)
- Reverse auction bidding began May 31, 2016
- 4 Stages (126 MHz, 114 MHz, 108 MHz, and 84 MHz)
- Final stage rule met for 84 MHz on January 18, 2017
 - Bidding continued after final stage rule
- Auction ended March 30, 2017 (10 months of bidding)

Auction Results



- 84 MHz recovered (14 channels)
 - 70 MHz sold to wireless carriers
 - 14 MHz for guard bands and duplex gap
- Forward auction proceeds \$19.77 billion
- Auction costs \$12.012 billion (total)
 - Station clearing \$10.055 billion
 - Station relocations \$1.75 billion (may go up)
 - Auction expenses \$207 million
- Government nets approx. \$7.75 billion

Auction Results

Final Band Plan

Band Plan No. 7 – 84 MHz Recovered

UHF Band		RAS/WMTS	G. B.	600 MHz Band Downlink							Duplex Gap	600 MHz Band Uplink							700 MHz UL
35	36	37	3	A	B	C	D	E	F	G	11	A	B	C	D	E	F	G	
			614 MHz	617 MHz							652 MHz	663 MHz							698 MHz

70 MHz for Wireless (7 5X5 Blocks)

One 3 MHz Guard Band

11 Duplex Gap

Reduced TV band to be existing channels 2-36

No “Market Variation” (no TV stations in 600 MHz Wireless Spectrum)

Auction Results

Station Tallies



- 175 stations paid in auction
 - 145 leaving the air
 - 29 moving from U to V
 - 1 moving from Hi-V to Low-V
 - 133 of the 145 to channel share – 12 stations leaving service

Auction Results

Station Tallies



- Post-auction occupied channels:
 - 1538 Total on UHF channels
Avg. 66.9/chan.; pre-auction avg. 46.2/chan.
 - 450 Total on Hi-VHF channels
Avg. 64.3/chan.; pre-auction avg. 63.1/chan.
 - 62 Total on Low-VHF channels
Avg. 12.4/chan); pre-auction avg. 9.0/chan.
 - 2050 Total stations post-auction
Avg. 58.6/chan.; pre-auction avg. 44.8/chan.

Repacking/Transition Plan

June 2014 IA Report and Order



- Post-auction - Remaining full power and Class A stations to be repacked into reduced TV spectrum using repacking optimization software with goals:
 - Relocate as few stations as possible
 - Minimize re-build costs
 - Minimize aggregate new interference to a station
 - Prioritize assignments to channel 5 in the low-VHF band and off channel 14 in the UHF band

Repacking/Transition Plan

June 2014 IA Report and Order

- Full power and Class A stations must cease operation on 600 MHz Band channels no later than 39 months from date of *Channel Reassignment PN* (i.e., end of the Post-Auction Transition Period)
- Stations going off-air must cease broadcasting within 90 days of receiving payment
- Reassigned stations to have three months to file construction permit applications for any minor changes to their facilities necessary to operate on their new channels
- After all stations have filed for their initial CPs, stations will be permitted to request alternate channels or expanded facilities

Repacking/Transition Plan

June 2014 IA Report and Order



- After the CP filing deadline, stations will have up to 36 months to transition to their new channels
- Stations that successfully bid to relinquish their license and channel-share will have six months from receipt of auction proceeds to cease operation
- FCC will assign stations construction deadlines within the 36 month transition period based on the unique circumstances of each station's move
- Stations may seek an STA to operate with temporary facilities on their new channel or on a channel relinquished by another bidder in order to continue

Repacking Issues



- Concerns about time allowed for the transition and funds available for relocating TV stations remaining on the air
 - Tower crews
 - Equipment availability
 - Weather
 - More expensive than \$1.75 billion on relocation fund
- Complexities involved in channel changes
- May be adjustments in the transition plan as needed after the auction is completed

Repacking

Transition Scheduling Plan - January 2017

Post-auction:

- Media Bureau and IA Task Force issued a [Transition Scheduling Plan](#), DA-17-107, for determining order and schedule for stations to transition to post-auction channels
- Stations to be assigned to one of ten “phases” during which they will modify their broadcast facilities as necessary to transmit on their new channel
- https://apps.fcc.gov/edocs_public/attachmatch/DA-17-107A1.pdf

Repacking

Transition Scheduling Plan



Also stated that the Media Bureau would issue an *Auction Closing and Channel Reassignment Public Notice* to:

- Announce that the reverse and forward auctions have ended
- Specify the effective date of the post-auction repacking (start of 39-month period)
- Publicly announce winning stations and the post transition channels assigned to stations continuing on-the-air
- Also announce the transition phase, phase completion date, and testing period for each transitioning station.
- [The *Closing and Reassignment Public Notice* is the same public notice referred to as the Channel Reassignment Public Notice in prior public notices and orders]

Incentive Auction Report



Thank you!