

THE CENTER FOR THE STUDY OF AUCTIONS, PROCUREMENTS AND COMPETITION POLICY

FCC SPECTRUM AUCTION DATA (Starting with Auction 84)

TECHNICAL REPORT

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Instructions on how to download and convert auction data from the FCC website:

1. Create an empty folder and download full information round results files (save only files with the ending spreadsheet) from the FCC website.
2. In Microsoft Excel create a new Macro-Enabled Workbook called **MainBook**. In this workbook create 12 empty sheets. Open VBA editor (Alt+F11) and paste the code from simpleXlsMerger.txt file. In the code, change the path to a folder where all the spreadsheets from part 1 are saved. Execute the macro. Save MainBook as Excel Workbook (not macro-enabled).
3. Sort AUCTION_ADMIN spreadsheet in **MainBook** by Round.
4. In Microsoft Excel create a new Workbook called **Items** in the same folder where **MainBook** has been saved. Copy there the spreadsheet called **Items** from the latest round of auction.
5. In Microsoft Excel create a new Workbook called **Bidders** in the same folder where **MainBook** has been saved. Copy there the spreadsheet called **Bidder_Statistics** from the latest round of auction.
6. In Microsoft Excel create a new Macro-Enabled Workbook called **FinalBook**. In this workbook create 12 empty sheets. Open VBA editor (Alt+F11) and paste the code from SheetsReorganizer.txt file. **FinalBook** has to be saved in the same folder, where files **MainBook.xlsx**, **Items.xlsx** and **Bidders.xlsx** have been created. Execute the macro.
7. Check the correspondence of UPRFRONT_PMNT and MINIMUM BID columns of Markets spreadsheet with Attachments to Procedures Public Notice, available on the FCC website.
8. Check the correspondence of UPRFONT_PMNT column of Bidders spreadsheet with Attachments to Qualified Bidders or Winning Bidders Public Notices, available on the FCC website.
9. Format each spreadsheet in **FinalBook**, using format painter and excel file for one of the previous auctions on the CAPCP website.
10. Copy all spreadsheets from **FinalBook** and paste them to a new file. One way to do it: right-click a sheet tab, and then click **Select All Sheets** from the shortcut menu. Right-click a sheet tab, and then click **Select Move or Copy**. In a dialog window **To Book**, choose the name of a new file. **This step is recommended as it could substantially reduce the size of the final file!!!**

Important:

1. Sometimes when running SheetsReorganizer macro in FinalBook, the error “**an Excel been out of memory**” could appear. To overcome this problem, run few (but not all) subroutines of SheetsReorganizer in a time (can be done using breakpoints in VBA editor).
2. For auctions with many items and many rounds the above procedure should be slightly modified. First, one may need to separate all rounds spreadsheets into several groups (in each group rounds should be consecutive, say rounds 1-50 in the first group, 51-100 in the second and so on). Second, one needs to run the above procedure separately for each group (keep **Items** and **Bidders** excel files empty for all except the last group) and then merge all FinalBooks together using simpleXlsMerger macro. Uncomment subroutine Sheet2DeleteRows when running SheetsReorganizer macro.
Hint: this modification is needed only if the number of items times the number of rounds is larger than one million, but strongly recommended even if it is greater than half a million. Thus, the number of rounds in each group should be such that the number of items times the number of rounds was not larger than half a million
3. The macro simpleXlsMerger usually takes less than 10 min to execute. The macro SheetsReorganizer usually takes less than 15 min to execute. If any of the macros runs more than this estimated time, one may want to terminate the Excel and run the macro again.
4. If earlier than 2007 version of MS Office is used, macros simpleXlsMerger and SheetsReorganizer should be modified by replacing 1048576 with a number of rows supported by the version of MS Office in use. Point 2 then needs to be modified correspondingly.

Important on data formats:

Starting with Auction 84, the FCC reports data in a slightly different format. There are two types of changes: 1) spreadsheets use different shortcuts for the column names; columns are placed in a different order; and some columns are missing comparably with old format; 2) spreadsheets have different names; and some spreadsheets are missing while others are added.

Since format used by the FCC prior to Auction 84 provides information in a cleaner and a better structured way, the procedure described here reformats the round by round information to the old format. The difference between the two formats is described below. To prevent any further confusion I will refer to the format used by the FCC prior to Auction 84 as the CAPCP format (all up to date spectrum data is saved in this format on the CAPCP website) and to the format used by the FCC starting with Auction 84 as the FCC format. The full description of the CAPCP format and it's comparison with FCC format is presented below.

Table 1: AllBids spreadsheet – provides information on all bids placed. Data in this spreadsheet is sorted by Round_Number (column B), License_Name (column C) and Bidder_Name (column L).

Formats			Description
CAPCP	FCC		
Column	Spread Sheet	Column	
AUCTION_NUMBER	ALL_BIDS	AUCTION_ID	Auction number
ROUND_NUMBER	ALL_BIDS	ROUND	Round number
LICENSE_NAME	ALL_BIDS	ITEM_NAME	Name of item or license
MARKET	ALL_BIDS	MARKET	Market abbreviation
FREQ_BLOCK	ALL_BIDS	BLOCK	Block
SUB_MARKET	ALL_BIDS	SUBMARKET	Submarket
BANDWITH_MHZ			Bandwith
MARKET_DESCR	ALL_BIDS	ITEM_DESCRIPTION	Market description
BID_UNITS	MARKETS*	BID_UNITS	Bidding units corresponding to item or license
POPULATION			Population
FCC_ACCT	ALL_BIDS	BIDDER_FRN	Bidder’s account number. The unique id number assigned for each bidder by the FCC
BIDDER_NAME	ALL_BIDS	BIDDER_NAME	Bidder’s name
BID_AMNT	ALL_BIDS	BID_AMOUNT	The amount of bid placed
NET_BID_AMNT	ALL_BIDS	NET_BID_AMOUNT	The amount of money bidder needs to pay if wins a license
BIDDING_CREDIT_PCTG			The percentage discount applied to a bid amount in order to determine the net bid amount
THEDATE	ALL_BIDS	DATE	The date bid was placed
THETIME	ROUNDS*	THETIME	The time bid was placed
INCR_BIDS	ALL_BIDS	INCREMENTS_OF_BID	The number of increments corresponding to the bid placed
RANDOM_NUMBER	ALL_BIDS	SELECTION_NUMBER	The random number assigned to each bidder by the FCC. In a case of a tie, the bidder with the highest random number wins
PROV_WINNING			Equals to “TRUE” if the bid is a provisionally winning bid, “FALSE” otherwise

Table 1 (Continue):

Formats			Description
CAPCP	FCC		
Column	Spread Sheet	Column	
WINNING			Equals to “TRUE” if the bid is a winning bid, “FALSE” otherwise
PREV_BID_AMNT	HIGHBIDS*	PREV_BID_AMNT	The amount of the previous provisionally winning bid
REV_BIDDER_ACCT	HIGHBIDS*	PREV_BIDDER_ACCT	The account of a bidder who placed the previous provisionally winning bid
ROUND_WITHDR	WITHDRAWALS*	ROUND_NUMBER	The round at which the bid was withdrawn
MAX_ELIG	ELIGIBILITY*	MAX_ELIG	Initial Eligibility. Eligibility is the maximum number of bidding units on which bidder may place bids
RMNG_WAIVR	ELIGIBILITY*	RMNG_WAIVR	The number of remaining waivers
WAIVR_IND	ELIGIBILITY*	WAIVR_IND	Waiver indicator, “A” for an “active” waiver and “P” for a “proactive” waiver
RMNG_WITHDRAWALS	ELIGIBILITY*	RMNG_WITHDRAWALS	The number of remaining withdrawals allowed
REQUIRED_ACT	ELIGIBILITY*	REQUIRED_ACT	Required activity level to be maintained in the next round. Activity level is the sum of the bidding units associated with items covered by the new and provisionally winning bids
CURRENT_ACT	ELIGIBILITY*	CURRENT_ACT	The sum of the bidding units associated with items on which a bidder holds provisionally winning bids

- Entries in blue color are missing in the FCC format and corresponding entries are left blank in CAPCP format;
- Entries in red color are missing in the FCC format and corresponding entries in the CAPCP format are filled using other available data. In particular, the entries with a star were taken from other spreadsheets in the CAPCP format. BIDDING_CREDIT_PCTG was recovered from BID_AMNT and NET_BID_AMOUNT using formula: $(NET_BID_AMOUNT - BID_AMNT) / BID_AMNT * 100\%$. PROV_WINNING and WINNING were recovered using the spreadsheets HighBids and WinningBids respectively.

Table 2: HighBids spreadsheet – provides the information on provisionally winning bids placed by bidders (FCC excluded). Data in this spreadsheet is sorted by Round_Number (column B) and License_Name (column D). Item is a corresponding spreadsheet in the FCC format; THETIME is filled in using Rounds spreadsheet in the CAPCP format.

Formats		Description
CAPCP, Column Name	FCC, Column Name	
AUCTION_NUMBER	AUCTION_ID	Auction number
ROUND_NUMBER	ROUND	Round at which bid is provisionally winning
LICENSE_NAME	ITEM_NAME	Name of item or license
MARKET	MARKET	Market abbreviation
FREQ_BLOCK	BLOCK	Block
SUB_MARKET	SUBMARKET	Submarket
FCC_ACCT	PW_BIDER_FRN	Provisional winner's account number. The unique id number assigned for each bidder by the FCC
BIDDER_NAME	PW_BIDDER	Provisional winner's name
BID_ROUND_NUM	ROUND_OF_PWB	Round at which the bid was placed
BID_AMNT	PWB_AMOUNT	The amount of bid placed
NET_BID_AMNT	NET_PWB_AMOUNT	The amount of money bidder needs to pay if wins a license
BIDDING_CREDIT_PCTG	BIDDING_CREDIT	The percentage discount applied to bid amount in order to determine the net bid amount
THEDATE	DATE	The date a bid was placed
THETIME	ROUNDS*, THETIME	The time a bid was placed
NUM_OF_BIDS	NUMBER_OF_BIDS	The total number of bids placed on the item in the current round
INCR_BIDS	INCREMENTS_OF_PWB	The number of increments corresponding to the provisionally winning bid placed
MIN_ACCEPT	MAB	The minimum acceptable bid in the next round
BID_INCR_PCTG	BID_INCREMENT_PERCENTAGE	The bid increment percentage
MAB_INCR	MAB_INCREMENT	The amount by which the minimum acceptable bid in the next round is higher than the provisionally winning bid

Table 2 (Continue): HighBids spreadsheet – provides information on the provisionally winning bids placed by the bidders (the FCC excluded). Data in this spreadsheet is sorted by Round_Number (column B) and License_Name (column D). Item is a corresponding spreadsheet in the FCC format.

Formats		Description
CAPCP, Column Name	FCC, Column Name	
MAB_INCR_PCTG	MAB_INCREMENT_PERCENTAGE	The percentage by which the minimum acceptable bid in the next round is higher than provisionally winning bid
PREV_BIDDER_ACCT	PREVIOUS_PW_BIDDER_FRN	Previous provisional winner's account
ROUND_PREV_PWB	ROUND_OF_PREVIOUS_PWB	Round at which previous provisionally winning bid was placed
PREV_BID_AMNT	PREVIOUS_PWB_AMOUNT	Previous provisionally winning bid
PREV_BIDDING_CREDIT_PCTG	PREVIOUS_BIDDING_CREDIT	The percentage discount applied to previous bid amount in order to determine the previous net bid amount
PREV_NET_BID_AMNT	PREVIOUS_NET_PWB_AMOUNT	Previous provisionally winning net bid amount
ITEM_ACTIVITY_WEIGHT	ACTIVITY_WEIGHT	
MAB_FLOOR	MAB_FLOOR	
MAB_CEILING	MAB_CEILING	

- For the relatively small auctions (number of items multiplied by number of rounds not exceeding 1 million) the provisionally winning bid on each license is reported for every round of the action. The number of rows in the spreadsheet equals to number of items times number of rounds plus one.
- For the relatively big auctions (number of items multiplied by number of rounds exceeding 1 million) the provisionally winning bid is reported only for a round at which the bid was actually placed.

Table 3: Eligibility spreadsheet – provides information on the bidder’s eligibility. Data in this spreadsheet is sorted by Round_Number (column B) and Bidder_Name (column D). Bidder_Statistics is a corresponding spreadsheet in the FCC format.

Formats		Description
CAPCP	FCC	
AUCTION_NUMBER	AUCTION_ID	Auction number
ROUND_NUMBER	ROUND	Round number
FCC_ACCT	BIDDER_FRN	Bidder’s account number. The unique id number assigned for each bidder by the FCC
BIDDER_NAME	BIDDER_NAME	Bidder name
NUM_OF_BIDS	NEW_BIDS	The number of new bids placed by a bidder
TOTAL_BIDS_AMNT	TOTAL_BID_AMOUNT	The sum of all new bids placed by a bidder
TOTAL_NET_BIDS_AMNT	TOTAL_NET_BID_AMOUNT	The discounted sum of all bids placed by a bidder. The actual amount of money bidder will need to pay if new bids are the winning bids
PWBS_NUMBER	NUMBER_PWBS	The number of the provisionally winning bids placed by a bidder
PWBS_AMNT	TOTAL_PWB_AMOUNT	The sum of all provisionally winning bids placed by a bidder
NET_PWBS_AMNT	TOTAL_NET_PWB_AMOUNT	The discounted sum of all provisionally winning bids placed by a bidder
MAX_ELIG	INITIAL_ELIGIBILITY	Initial Eligibility. Eligibility is the maximum number of bidding units on which bidder may place bids
UNUSED_ELIGIB	CURRENT_ELIGIBILITY	Current Eligibility
REQUIRED_ACT		Required activity level to be maintained in the next round. Activity level is the sum of the bidding units associated with the items covered by new and the provisionally winning bids
CURRENT_ACT	CURRENT_ACTIVITY	The sum of the bidding units associated with items on which bidder holds provisionally winning bids
ADDTNL_ACT_REQ	ADDITIONAL_ACTIVITY_REQUIRED	Additional activity level required. The required sum of the bidding units associated with the new bids placed in the next round
AT_RISK	AT_RISK	The indicator of whether additional activity (placing new bids) is required from a bidder in the next round (Y for yes)

		and N for no) in order to not lose his eligibility. Equals to N if and only if ADDTNL_ACT_REQ equals to zero
ELIG_CHANGE	CHANGE_IN_ELIGIBILITY	The amount by which current eligibility was reduced in this round
RMNG_WAIVR	WAIVERS_REMAINING	The number of remaining waivers
WIAVR_IND	WAIVER_TYPE	Waiver indicator, “A” for an “active” waiver and “P” for a “proactive” waiver
RMNG_WITHDRAWALS	WITHDRAWALS_REMAINING	The number of the remaining withdrawals allowed

REQUIRED_ACT is recovered using formula: **REQUIRED_ACT** = CURRENT_ACT + ADDTNL_ACT_REQ

Table 4: Withdrawals spreadsheet – provides information on the bids that were withdrawn during the auction. Data in this spreadsheet is sorted by Round_Number (column B) and License_Name (column D). Withdrawn_PWBS is a corresponding spreadsheet in the FCC format; THETIME is filled in using Rounds spreadsheet in the CAPCP format.

Formats		Description
CAPCP, Column Name	FCC, Column Name	
AUCTION_NUMBER	AUCTION_ID	Auction number
LICENSE_NAME	ITEM_NAME	Name of item or license
ROUND_NUMBER	ROUND_OF_WITHDRWAL	Round at which bid was withdrawn
BID_ROUND_NUMBER	ROUND_WITHDRAWN_PWB_PLACED	Round at which withdrawn bid was placed
FCC_ACCT	BIDDER_FRN	Bidder’s account number. The unique id number assigned for each bidder by FCC
BIDDER_NAME	BIDDER_NAME	Bidder’s name
BID_AMNT	WITHDRAWN_PWB_AMOUNT	The amount of bid that was withdrawn
NET_BID_AMNT	WITHDRAWN_NET_PWB_AMOUNT	The discounted amount of bid that was withdrawn. The actual amount would be paid in the event of winning
THEDATE	DATE	The date at which bid was withdrawn
THETIME	ROUNDS*, THETIME	The time at which bid was withdrawn
MIN_ACCEPT	MAB	The minimum acceptable bid in the next round

Table 5: Bidders spreadsheet – provides information on the bidders that participated in the auction. Data in this spreadsheet is sorted by Bidder_Name (column D). Bidder_Statistics (the last round only) is a corresponding spreadsheet in the FCC format; BIDDING_CREDIT_PCTG is filled in using AllBids spreadsheet in the CAPCP format.

Formats		Description
CAPCP, Column Name	FCC, Column Name	
AUCTION_NUMBER	AUCTION_ID	Auction number
BIDDER_NUMBER		
BIDDER_NAME	BIDDER_NAME	Bidder's name
FCC_ACCT	BIDDER_FRN	Bidder's account number. The unique id number assigned for each bidder by the FCC
UPFRONT_PMNT	INITIAL_ELIGIBILITY	Upfront payment. Typically equals to the initial eligibility, but should be double checked with Attachments to Qualified Bidders or Winning Bidders Public Notices
BID_UNITS	INITIAL_ELIGIBILITY	The maximum number of bidding units on which bidder may place bids. It equals to the initial eligibility
BIDDING_CREDIT_PCTG	ALLBIDS*, BIDDING_CREDIT_PCTG	The percentage discount applied to the bid amount in order to determine the net bid amount
PREF	BIDDING_CREDIT	The indicator of whether bidder is eligible for some discount (Y for yes and N for no). Equals to N if and only if BIDDING_CREDIT_PCTG equals to zero

Table 6: Markets spreadsheet – provides the information on items or licenses sold through the auction. Data in this spreadsheet is sorted by License_Name (column D). Items (the last round only) is a corresponding spreadsheet in the FCC format

Formats		Description
CAPCP, Column Name	FCC, Column Name	
AUCTION_NUMBER	AUCTION_ID	Auction number
LICENSE_NAME	ITEM_NAME	Name of item or license
SERVICE_CODE		
MARKET	MARKET	Market abbreviation
FREQ_BLOCK	BLOCK	Block
SUB_MARKET	SUBMARKET	Submarket
CHANNEL_NO		Channel number
MARKET_DESC	ITEM_DESCRIPTION	Market description
BANDWIDTH_MHZ	SIZE_MHZ	Bandwidth
OPEN		
POPULATION		Population
BID_UNITS	BIDDING_UNITS	Bidding units corresponding to item or license
UPFRONT_PMNT	BIDDING_UNITS	Upfront payment corresponding to item or license. Typically equals to the Bidding Units, but should be double checked with Attachments to Procedures Public Notice
MINIMUM_BID	BIDDING_UNITS	The minimum acceptable bid. Typically equals to the Bidding Units, but should be double checked with Attachments to Procedures Public Notice
FREQUENCY		
BLOCKS		
CHANELS		
COMMENTS	AUCTION_DESCRIPTION	Auction description
PREV_HIGH		
PARTIAL_MKT		

Table 7: WinningBids spreadsheet – provides information on the winning bids in the auction. Data in this spreadsheet is sorted by License_Name (column B). Items (the last round only) is a corresponding spreadsheet in FCC format; THETIME is filled in using Rounds spreadsheet in the CAPCP format.

Formats		Description
CAPCP, Column Name	FCC, Column Name	
AUCTION_NUMBER	AUCTION_ID	Auction number
LICENSE_NAME	ITEM_NAME	Name of item or license
MARKET	MARKET	Market abbreviation
FREQ_BLOCK	BLOCK	Block
SUB_MARKET	SUBMARKET	Submarket
FCC_ACCT	PW_BIDDER_FRN	The winning bidder's account number. The unique id number assigned for each bidder by FCC
BIDDER_NAME	PR_BIDDER	Bidder's name
BID_ROUND_NUM	ROUND_OF_PWB	The round number at which the winning bid was placed
BID_AMNT	PWB_AMOUNT	The amount of bid placed
NET_BID_AMNT	NET_PWB_AMOUNT	The actual amount of money the winning bidder needs to pay
THEDATE	DATE	The date at which the winning bid was placed
THETIME	ROUNDS*, THETIME	The time at which the winning bid was placed

Table 8: Rounds spreadsheet – provides general information on how each round of the auctions proceeded. Data in this spreadsheet is sorted by Round_Number (column B). Round_Statistics is a corresponding spreadsheet in the FCC format.

Formats		Description
CAPCP, Column Name	FCC, Column Name	
AUCTION_NUMBER	AUCTION_ID	Auction number
ROUND_NUMBER	ROUND	Round number
THEDATE	ROUND_START_DATE_TIME	The date at which round starts
THETIME	ROUND_START_DATE_TIME	The time at which round starts
STAGE	STAGE	Stage of the auction
STAGE_REQ	AUCTION_ADMIN, REQUIRED_ACTIVITY_PERCENTAGE	The percentage of the current bidding eligibility on which a bidder needs to be active in order to maintain his bidding eligibility
STAGE_TRANSIT_PCTG	STAGE_TRANSITION_PERCENTAGE	The proxy to the percentage of licenses at which the provisionally winning bidder changed during the current round. Calculated as a ratio of Total Eligibility of Licenses on which the provisionally winning bidder was changed to Max Total Eligibility (the Sum of Bid Units over all licenses)
STAGE_TRANSIT_PCTG_WO_FCC	STAGE_TRANSITION_PERCENTAGE_LESS_FCC_HELD	The proxy to the percentage of licenses at which the provisionally winning bidder changed during current round. In calculations, the licenses held by FCC are excluded
NUM_OF_BIDS	NEW_BIDS	Number of the new bids placed during round
ELIGIB_BIDDERS	ELIGIBLE_BIDDERS	The number of eligible bidders in the current round
ELIGIBILITY_RATIO	ELIGIBILITY_RATIO	The proxy to how many bidders on average bid on each license. Could be calculated as a ratio of Unused Total Eligibility to Max Total Eligibility. Here, Unused Total Eligibility is the sum of current eligibility over all bidders and Max Total Eligibility is the sum of Bid Units over all licenses
ELIGIBILITY_RATIO_WO_FCC	ELIGIBILITY_RATIO_LESS_FCC_HELD	The proxy to how many bidders on average bid on each license not currently held by FCC. The formula is the same

		as for Eligibility Ratio, but when calculating Max Total Eligibility, the sum is taken over all licenses not held by the FCC
PWBS_NUMBER	NUMBER_PWBS	Number of items covered by the provisionally winning bidders (not FCC)
FCC_LICENSES	FCC_HELD_LICENSES	Number of licenses held by the FCC
PWBS_AMNT	TOTAL_PWB_AMOUNT	The sum of all provisionally winning bids
NET_PWBS_AMNT	TOTAL_NET_PWB_AMOUNT	The net sum of the provisionally bidding amounts across all licenses. The revenue that will be collected by FCC if auction ends in this round
CHNG_PWB_BIDS	DOLLAR_CHANGE_IN_PWB_AMOUNT	The dollar change in the sum of the provisionally winning bids
CHNG_NET_PWB_BIDS	DOLLAR_CHANGE_IN_NET_PWB_AMOUNT	The dollar change in the net sum of the provisionally winning bids
PWB_CHANGE_PCTG	PERCENTAGE_CHANGE_IN_PWB_AMOUNT	The percentage change in the sum of the provisionally winning bids
NET_PWB_CHANGE_PCTG	PERCENTAGE_CHANGE_IN_NET_PWB_AMOUNT	The percentage change in the net sum of the provisionally winning bids
TOTAL_BIDS_AMNT		
TOTAL_NET_BIDS_AMNT		
CHNG_TOTAL_BIDS		
CHNG_NET_BIDS		
BIDDERS_AT_RISK	BIDDERS_AT_RISK	The total number of bidders that are at risk to lose their eligibility in the next round
NUMBER_REDUCED	NUMBER_OF_BIDDERS_THAT_REDUCED	Number of bidders that reduced their eligibility
BU_REDUCED	BIDDING_UNITS_REDUCED	The total number of bidding units reduced
BID_UNITS_PCTG	PERCENTAGE_OF_COVERED_BIDDING_UNITS	The percentage of licenses covered by the provisionally winning bidders (weighted by bidding units)
PROACTIVE_WAIVERS_USED	PROACTIVE_WAIVERS_USED	The indicator of whether proactive waivers were used during round
NUM_WITHDR_BIDS	WITHDRAWN_BIDS	The number of the withdrawn bids
NUM_DROP_BIDS	DROPPED_BIDS	The number of the dropped bids

Table 9: Increments spreadsheet – provides general bidding statistics. Data in this spreadsheet is sorted by Round_Number (column B). Increment_Statistics is a corresponding spreadsheet in the FCC format.

Formats		Description
CAPCP, Column Name	FCC, Column Name	
AUCTION_NUMBER	AUCTION_ID	Auction number
ROUND_NUMBER	ROUND	Round number
INCR_1	INCREMENT_1	Total number of bids that equal to the minimum acceptable bid
INCR_2	INCREMENT_2	Total number of bids that equal to the second acceptable bid
INCR_3	INCREMENT_3	Total number of bids that equal to the third acceptable bid
INCR_4	INCREMENT_4	Total number of bids that equal to the forth acceptable bid
INCR_5	INCREMENT_5	Total number of bids that equal to the fifth acceptable bid
INCR_6	INCREMENT_6	Total number of bids that equal to the sixth acceptable bid
INCR_7	INCREMENT_7	Total number of bids that equal to the seventh acceptable bid
INCR_8	INCREMENT_8	Total number of bids that equal to the eighth acceptable bid
INCR_9	INCREMENT_9	Total number of bids that equal to the ninth acceptable bid

Table 10: WaiverStatistics spreadsheet – provides the waivers statistics. Data in this spreadsheet is sorted by Round_Number (column B) and FCC_ACCT (column C). Waivers is a corresponding spreadsheet in the FCC format

Formats		Description
CAPCP, Column Name	FCC, Column Name	
AUCTION_NUMBER	AUCTION_ID	Auction number
ROUND_NUMBER	ROUND	Round number at which waiver was used
FCC_ACCT	BIDDER_FRN	Bidder’s account number. The unique id number assigned for each bidder by the FCC
WAIVR_IND	WAIVER_TYPE	Waiver indicator, “A” for “active” waiver and “P” for proactive waiver
RMNG_WAIVR	WAIVERS_REMAINING	The number of remaining waivers

Table 11: RaisingOwnHigh spreadsheet – provides information on bidders who raised their own high bids. Data in this spreadsheet is sorted by Round_Number (column B), License_Name (column C) and FCC_ACCT (column D). Bidder_Raising_Own_PWB is a corresponding spreadsheet in FCC format; THETIME is filled in using Rounds spreadsheet in CAPCP format.

Formats		Description
CAPCP, Column Name	FCC, Column Name	
AUCTION_NUMBER	AUCTION_ID	Auction number
ROUND_NUMBER	ROUND	Round number at which bidder raised his own high bid
LICENSE_NAME	ITEM_NAME	The name of item or license
FCC_ACCT	BIDDER_FRN	Bidder's account number. The unique id number assigned for each bidder by the FCC
INC_BIDS	INCREMENTS_OF_BIDS	The number of increments corresponding to the bid placed
BID_AMNT	BID_AMOUNT	The amount of bid placed
NET_BID_AMNT	NET_BID_AMOUNT	The amount of money bidder needs to pay if wins a license
THEDATE	DATE	The date at which bid was placed
THETIME	ROUND*, THETIME	The time at which bid was placed

Table 12: BiddersReduced spreadsheet – provides information on the bidders who reduced their current eligibility requirements. Data in this spreadsheet is sorted by Round_Number (Column B) and FCC_ACCT (Column D). Bidders_That_Reduced is a corresponding spreadsheet in the FCC format

Formats		Description
CAPCP, Column Name	FCC, Column Name	
AUCTION_NUMBER	AUCTION_ID	Auction number
ROUND_NUMBER	ROUND	Round at which bidder reduced his (her) eligibility
FCC_ACCT	BIDDER_FRN	Bidder's account number. The unique id number assigned for each bidder by FCC
BU_REDUCED	BIDDING_UNITS_REDUCED	Number of bidding units by which eligibility was reduced
UNUSED_ELIG	CURRENT_ELIGIBILITY	Current eligibility. Eligibility is the maximum number of bidding units on which bidder may place bids