

**BROADCAST INCENTIVE AUCTION  
FORWARD AUCTION ASSIGNMENT PHASE BIDDER DATA FILES**

**Table of Contents**

1. Introduction.....	2
2. Bidder Download Files .....	2
2.1. My Bids and Options .....	2
2.2. My Bid Options Details .....	5
2.3. My Results .....	6
2.4. My Cumulative Results.....	8
3. Bidder Upload File.....	10
4. Appendix: Data Type Definitions .....	12

## 1. Introduction

This document provides the data file specifications for the bidding related upload and download files that will be available to bidders during the assignment phase of the forward auction. Each file specification includes the format of the file and definitions of the data elements in the files including a name, description, data type, examples and notes.<sup>1</sup> Data type definitions and notation rules are explained in an appendix attached to this document.

In addition to the data file specifications, a sample data file for each file is available on the Auction 1002 website ([www.fcc.gov/auctions/1002](http://www.fcc.gov/auctions/1002)) under the Data tab.<sup>2</sup> The sample data shows the downloads and upload of a bidder with a small business bidding credit. The files have been downloaded after the results of Round 13 have been posted. In the sample scenario, Rounds 1 to 12 cover high-demand PEAs, while Rounds 13 onwards cover the remaining PEAs. In Rounds 13 on, multiple assignment phase markets may be run in the same round (such as Round 13, which has six assignment phase markets running in parallel). The data also illustrate how PEAs can be grouped into a single assignment phase market, such as in Round 3, in which PEA007, PEA009, PEA010, and PEA011 are grouped into one assignment phase market. In the scenario, the bidder does not have winnings in all markets and therefore cannot bid in every round. Furthermore, before the bidding in the assignment phase begins, the bidder is pre-assigned licenses in PEA014 and PEA016 because there is only one assignment possible in those PEAs. The sample upload file shows a file that can be uploaded after the results of Round 13 have been posted that includes bids for Rounds 14 and 15.

We emphasize that the scenarios and bidding examples provided are not meant to reflect any predictions or assumptions by the Commission regarding bidding activity, the number of rounds, or the outcome of the incentive auction.

## 2. Bidder Download Files

This section provides the specifications of the download files available to bidders during the assignment phase of the forward auction. All files are available at all times during the assignment phase.

### 2.1. My Bids and Options

**File name:** My-Bids-and-Options.csv

The My Bids and Options file provides information about each of the bidding options available to the bidder for each assignment phase market that it can bid in based on its winnings in the clock phase, and includes the round number associated with each assignment phase market. It also includes options that have been pre-assigned to the bidder in advance of the assignment rounds because only one bidding option is available to each of the winners in an assignment phase market. Similarly, it includes any options that will be automatically assigned to the bidder during the assignment rounds because only one option is available to that bidder for the assignment phase market. The Auction System will not allow a bidder to submit a bid on pre-assigned or automatically assigned options. For a bidding option that the

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<sup>1</sup> We note that the terminology used in this Public Notice is defined in the technical appendices to the *Auction 1000 Application Procedures Public Notice*. See *Application Procedures for Broadcast Incentive Auction Scheduled to Begin on March 29, 2016; Technical Formulas for Competitive Bidding*, AU Docket No. 14-252, GN Docket No. 12-268, WT Docket No. 12-269, Public Notice, DA 15-1183 (WTB rel. Oct. 15, 2015) (*Auction 1000 Application Procedures Public Notice*).

<sup>2</sup> The Auction 1002 website provides a single ZIP file containing the individual CSV files. The Auction System provides each of the CSV files separately.

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bidder is permitted to bid on, bid-related data — including the submitted bid amount, the name of the authorized bidder that submitted the bids, and the date and time that the bid was submitted — appears in this file after the bidder has submitted the bids.

**File Structure:**

- CSV file (first row contains header).
- One record for each bidding option for the bidder.

<b>Field</b>	<b>Description</b>	<b>Data Type</b>	<b>Examples/Notes</b>
auction_id	The FCC auction number for the forward auction.	String	1002  <i>This will be the same for all records.</i>
bidder	Bidder name	String	Company XYZ  “ABC, Inc.”  <i>This will be the same for all records.</i>
frn	The bidder’s FCC Registration Number (FRN) which uniquely identifies a bidder.	String {10}	0003645843  <i>This will be the same for all records.</i>
round	Round number	Integer	12  <i>This will be 0 for any pre-assigned bidding options.</i>
region	The REAG number of the PEA(s), if the PEA(s) are not high-demand, and “high demand” otherwise	String [high demand  REAG 1  REAG 2  REAG 3  REAG 4  REAG 5  REAG 6]	REAG 2  high demand
market_number	The PEA (Partial Economic Area) ID(s) in the assignment phase market that is associated with the bidding option	String	PEA001  PEA007;PEA009  <i>Multiple PEAs are separated with semi-colons.</i>

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<b>Field</b>	<b>Description</b>	<b>Data Type</b>	<b>Examples/Notes</b>
market_name	The PEA name(s) associated with the bidding option	String	<p>“New York, NY”</p> <p>“Boston, MA;Miami, FL”</p> <p><i>Multiple PEAs are separated with semi-colons.</i></p>
c1_winnings	The total number of Category 1 blocks that the bidder has in the assignment phase market	Integer	2
c2_winnings	The total number of Category 2 blocks that the bidder has in the assignment phase market	Integer	1
option	The specific blocks in the bidding option	String	BCD
impairment_adjusted_price	The total impairment-adjusted clock-phase price for the option, summed across licenses in the bidding option.	Integer	2960000
assignment_round_bid	The bid amount submitted for the bidding option	Integer	<p>182000</p> <p><i>NULL for all bidding options that the bidder cannot bid on. Otherwise, 0 by default or the bid amount submitted by the bidder.</i></p>
entered_by	Name of authorized bidder. If a telephonic bid assistant submits the bid on behalf of the authorized bidder, it also includes the name of the telephonic bid assistant in parentheses.	String	<p>Karen Smith</p> <p>Karen Smith (Juliet Brown)</p> <p><i>NULL if the bidder has not submitted a bid for the bidding option.</i></p>
entered_time	The date and time that the bid was submitted.	<p>String</p> <p>YYYY-MM-DD HH:MM:SS</p>	<p>2015-04-12 15:21:47</p> <p><i>All time stamps are in Eastern Time.</i></p> <p><i>NULL if the bidder has not submitted a bid for the bidding option.</i></p>

**2.2. My Bid Options Details**

**File name:** My-Bid-Options-Details.csv

The My Bid Options Details file provides the details of each license in each bidding option listed in the above “My Bids and Options” file. These details include impairment information, and the clock phase price of the license. The data within this file does not change during the assignment phase.

**File Structure:**

- CSV file (first row contains header).
- One record for each license in each bidding option.

<b>Field</b>	<b>Description</b>	<b>Data Type</b>	<b>Examples/Notes</b>
auction_id	The FCC auction number for the forward auction.	String	1002  <i>This will be the same for all records.</i>
bidder	Bidder name	String	Company XYZ  “ABC, Inc.”  <i>This will be the same for all records.</i>
frn	The bidder’s FCC Registration Number (FRN) which uniquely identifies a bidder.	String {10}	0003645843  <i>This will be the same for all records.</i>
round	Round number	Integer	12  <i>This will be 0 for any pre-assigned bidding options.</i>
region	The REAG number of the PEA(s), if the PEA(s) are not high-demand, and “high demand” otherwise	String [high demand  REAG 1  REAG 2  REAG 3  REAG 4  REAG 5  REAG 6]	REAG 2  high demand
option	The specific blocks for the bidding option	String	BCD
block	The license block of the license	String {1}	B
market_number	The PEA ID	String ([PEA][0-9] [0-9][0-9]){6}	PEA001
market_name	The PEA name	String	“New York, NY”
category	The license category (including whether it would be designated as reserved for the bidding option)	String [C1-R C1-U C2] {4}	C1-R

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<b>Field</b>	<b>Description</b>	<b>Data Type</b>	<b>Examples/Notes</b>
clock_phase_price	The clock phase price	Integer	183800
impairment_percent	The impairment percentage of the license (as a percentage between 0 and 100 to one decimal place)	Decimal	12.1
impairment_discount	The discount to the clock phase price for the license based on the percent of impairment, rounded to the nearest dollar	Integer	22240
impairment_adjusted_price	The clock phase price of the license adjusted for impairment, rounded to the nearest dollar	Integer	161560

**2.3. My Results**

**File name:** My-Results.csv

The My Results file provides the assignment results for the bidder, listing each bidding option that was won by the bidder (its “winning assignment”) and its assignment phase payment, if any. It also includes the winning assignments that were pre-assigned to the bidder in advance of the first assignment round. Therefore, before the first assignment round, this file contains just these pre-assignments (if any).

**File Structure:**

- CSV file (first row contains header).
- One record per winning assignment.

<b>Field</b>	<b>Description</b>	<b>Data Type</b>	<b>Examples/Notes</b>
auction_id	The FCC auction number for the forward auction.	String	1002  <i>This will be the same for all records.</i>
bidder	Bidder name	String	Company XYZ  “ABC, Inc.”  <i>This will be the same for all records.</i>
frn	The bidder’s FCC Registration Number (FRN) which uniquely identifies a bidder.	String {10}	0003645843  <i>This will be the same for all records.</i>
round	Round number	Integer	12  <i>This will be 0 for any pre-assigned bidding options.</i>

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<b>Field</b>	<b>Description</b>	<b>Data Type</b>	<b>Examples/Notes</b>
region	The REAG number of the PEA(s), if the PEA(s) are not high-demand, and “high demand” otherwise	String [high demand  REAG 1  REAG 2  REAG 3  REAG 4  REAG 5  REAG 6]	REAG 2  high demand
market_number	The PEA (Partial Economic Area) ID(s)	String	PEA001  PEA007;PEA009  <i>Multiple PEAs are separated with semi-colons.</i>
market_name	The PEA name(s)	String	“New York, NY”  “Boston, MA;Miami, FL”  <i>Multiple PEAs are separated with semi-colons.</i>
c1_winnings	The total number of Category 1 blocks that the bidder has in the assignment phase market	Integer	2
c2_winnings	The total number of Category 2 blocks that the bidder has in the assignment phase market	Integer	1
option_assigned	The specific license blocks for the winning assignment	String	BCD
impairment_adjusted_price	The total impairment-adjusted clock-phase price for the winning assignment, summed across all licenses in the bidding option	Integer	2960000
assignment_round_bid	The bid amount submitted for the bidding option. If the bidder did not submit a bid for the bidding option or if the bidding option was automatically assigned the value is 0.	Integer	182000  0
assignment_payment	The assignment phase payment for the winning assignment	Integer	156000

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<b>Field</b>	<b>Description</b>	<b>Data Type</b>	<b>Examples/Notes</b>
adjusted_gross_payment	The gross payment amount for the winning assignment which is the total impairment-adjusted clock-phase price summed across all licenses in the bidding option plus the assignment phase payment.	Integer	3116000

**2.4. My Cumulative Results**

**File name:** My-Cumulative-Results.csv

This My Cumulative Results file contains the cumulative payment amounts for the bidder after each round. The file contains three rows for every assignment round, covering (i), total payments for past rounds; (ii), total estimated payments in future rounds; and (iii), the total of (i) and (ii). This file therefore provides a running estimate of the final forward auction payment based on the information known at the time of that assignment round. For bidders with a bidding credit, this file includes additional information about discounts and bidding credit caps known at that point in time.

Before the first assignment round, the file will contain three rows of data covering any pre-assignments (associated with a round denoted 0). After the results of each round are posted, three additional rows are added to the file, and the additional rows reflect the payment status after that round. Data associated with past rounds is not changed. Following the final assignment round, the values in the third row for that round will equal the values in the first row, given that there are no future rounds (and thus all values in second row will be zero), and the “net\_value” in the first or third row associated with that round provides the final forward auction payment for the bidder.

**File Structure:**

- CSV file (first row contains header).
- Three rows providing the payment status as of the completion of an assignment round are added when the results of that round are posted:
  - The first row, denoted “Adjusted Payment” includes information for all posted assignment rounds, as indicated by the “rounds\_completed” field (i.e. all rounds for which the results have been posted);
  - The second row, denoted “Unadjusted Commitment” provides payment estimates for all future assignment rounds, i.e. all rounds after the round indicated by the “rounds\_completed” field. Given these rounds have yet to be held, these values are based strictly on the bidder’s clock phase winning bid amounts and do not take into account any adjustments as a result of impairments nor any assignment phase payments;
  - The third row, denoted “Total” provides the total of the first and second rows.
- For bidders with no bidding credit, the file contains six columns; for bidders with a rural bidding credit, the file contains nine columns; for bidders with a small business bidding credit, the file contains ten columns. The additional columns provide information about the discounts associated with the credits.



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<b>Field</b>	<b>Description</b>	<b>Data Type</b>	<b>Examples/Notes</b>
auction_id	The FCC auction number for the forward auction	String	1002  <i>This will be the same for all records.</i>
bidder	Bidder name	String	Company XYZ  "ABC, Inc."  <i>This will be the same for all records.</i>
frn	The bidder's FCC Registration Number (FRN) which uniquely identifies a bidder	Alpha-numeric {10}	0003645843  <i>This will be the same for all records.</i>
rounds_completed	Round number of the last posted assignment round covered by the data, or 0 for data relating to pre-assignments	Integer	12
value_type	Indication whether the row is relating to (i) an adjusted payment, (ii) an unadjusted commitment or (iii) the total of the adjusted payment and unadjusted commitment	String [Adjusted Payment  Unadjusted Commitment  Total]	Adjusted Payment
gross_value	The gross amount (without any bidding credit discounts applied)	Integer	1100000000
discount_capped_all_markets	The discount to the gross amount for all markets taking into account the small market cap (if applicable) and the overall cap	Integer	150000000  <i>This field is not included if the bidder is not eligible for a bidding credit.</i>
net_value	The net amount (i.e. the gross amount minus the capped discount)	Integer	950000000  <i>This field is not included if the bidder is not eligible for a bidding credit.</i>
discount_uncapped_all_markets	The discount to the gross amount for all markets without taking into account the small market cap (if applicable) or the overall cap	Integer	165000000  <i>This field is not included if the bidder is not eligible for a bidding credit.</i>

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<b>Field</b>	<b>Description</b>	<b>Data Type</b>	<b>Examples/Notes</b>
discount_uncapped_small_markets	The discount to the gross amount for small markets without taking into account the small market cap	Integer	22100000  <i>This field is only included if the bidder is eligible for the small business bidding credit.</i>

### **3. Bidder Upload File**

Bidders are permitted to upload bids at any time during the assignment phase for current and future rounds. This can be done by downloading the “My Bids and Options” download and using it as a template for an upload file by entering the desired bid amounts in the “assignment\_round\_bid” field, and uploading the revised file. A bid amount is required for all current and future bidding options that the bidder can bid on (those in which the bidder has more than one bidding option in the round) but a value of 0 is permissible as indicated as the default in the “My Bids and Options” download.

A bidder may also create its own bid upload file. Bidders that choose to create their own bid upload files must ensure that the file contains a header row, and a single row for every bidding option for the current and future rounds in which the bidder can place bids. Further requirements about a bid upload file are provided below.

#### **File Requirements:**

- The upload file must be in the CSV format. A particular file name is not required.
- The following fields are required and must have the exact field names as column headings in the first row. All other fields will be ignored.
  - Round number (column header “round”)
  - Market number(s) (column header “market\_number”)
  - Bidding option (column header “option”)
  - Bid amount (column header "assignment\_round\_bid")
- A bid amount for each bidding option in which the bidder can place bids is required but a value of 0 is permissible.
- Bidding options in which the bidder cannot place bids (because it has only one option) or bidding options from past rounds are not required and if included will be ignored.
- A bid upload file will be rejected in its entirety if any of the following conditions occur:
  - It does not match the format described;
  - An option for a current or future round for which bidder can bid is not included in the file;
  - The combination of round, market\_number, and option is not consistent with the bidding options available to the bidder;
  - There is a duplicate combination of round, market\_number, and option in the file;
  - The price entered for the assignment\_round\_bid is invalid (because it is not a whole number between 0 and 10 billion); or

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- The upload includes revised bids for a round that has just closed and the results of that round have not yet been posted.

<b>Field</b>	<b>Description</b>	<b>Data Type</b>	<b>Examples/Notes</b>
round	Round number	Integer	12
market_number	The PEA (Partial Economic Area) ID(s)	String	PEA001  PEA007;PEA009  <i>Multiple PEAs must be separated with semi-colons.</i>
option	The specific blocks for the bidding option	String	BCD
assignment_round_bid	The bid amount to be submitted for the bidding option	Integer [0 - 10,000,000,000]	182000  0  <i>For all bid options that the bidder can bid on, this must be either 0 or a bid amount entered by the bidder.</i>

#### 4. Appendix: Data Type Definitions

The following is a guide to interpreting data types defined in this document. This guide is based on standard expressions used in XML.

##### Valid Data Types used in this Document

**Character:** A character is a single standard ASCII character. The following list has examples of valid ASCII characters:

- a
- D
- 3
- %

**String:** A string contains one or more characters and can contain whitespace. The following list has examples of valid strings:

- PEA001
- 005
- 588.3-593.3 MHz + 628.3-633.3 MHz
- Huntsville-Decatur-Florence, AL

Note that strings containing a comma that are included in a CSV formatted file need to include quotation marks around them. In the above example, “Huntsville-Decatur-Florence, AL” would be the correct format for the string in a CSV file.

**Numeric:** Numeric is a generic data type that covers a number of different underlying data types. As a result, anything defined as numeric could be any of the following:

- Decimal
- Integer

**Integer:** The integer data type is used to specify a numeric value without a fractional component.

- It’s assumed that any integers defined in this document are unsigned and never include a (+) plus or (-) minus sign. Any signed integers containing a + or – are considered invalid.
- If the integer is of defined length then curly brackets should be used. E.g., {3} indicates the integer should be exactly 3 numbers long.

The following list has examples of valid integers:

- 009
- 9
- 2147483647

The following list has examples of *invalid* integers:

- -009
- +009

### Restricting values for a data type

Restrictions are used to define acceptable values for any given data type. The following lexicon is used when defining data types:

- Square brackets define the *pattern*.
  - e.g., [A-L] means only the uppercase letters A through L are allowed.
  - e.g., [U|D] means only the uppercase letters U or D are allowed.
  - e.g., [0-9] means only the numbers 0 through 9 are allowed
- Curly brackets define the *length* including whitespace.
  - e.g., {3} means the value has to be exactly 3 characters long.
  - e.g., {1,3} means the value has to be a minimum of 1 character and a maximum of 3 characters.
  - e.g., {0,50} means the value has to be a minimum of 0 characters and a maximum of 50 characters.

#### Example 1:

The Data Type is defined as follows:

**Integer**  
**{3}**

The curly brackets mean only a 3 digit integer is allowed.

Valid Values for example 1:

- 009
- 056
- 102

Invalid Values for example 1:

- 09
- 3502
- 1
- +12
- -35

#### Example 2:

The Data Type is defined as follows:

**String**  
**[A-L]{1}**

The square brackets mean only the uppercase letters A through L are allowed and the curly brackets mean it must be exactly 1 character long.

Valid values for example 2:

- B
- L

Invalid values for example 2:

- a
- M

- 6

**Example 3:**

The Data Type is defined as follows:

**String**  
**[0-9]{3}**

The square brackets mean only the numbers 0 through 9 are allowed and the curly brackets mean it must be 3 characters long.

Valid values for example 3:

- 001
- 023
- 358

Invalid values for example 3:

- 2
- 01
- 2026

**Example 4:**

The Data Type is defined as follows:

**String**  
**[0-9]{1,2}**

The square brackets mean only the numbers 0 through 9 are allowed and the curly brackets mean it must be a minimum of 1 character long and a maximum of 2 characters long.

Valid values for example 4:

- 4
- 04
- 41

Invalid values for example 4:

- 123
- Blank or null value

**Example 5:**

The Data Type is defined as follows:

**String**  
**[US|CA|MX]{2}**

The square brackets mean the pattern must be either US, CA or MX. The curly brackets mean it must be exactly 2 characters long.

Valid values for example 5:

- US
- CA

Invalid values for example 5:

- C

- USA

**Example 6:**

The Data Type is defined as follows:

**String**  
**((PEA)[0-9] [0-9] [0-9]){6}**

The square brackets inside the round brackets mean the pattern must be a concatenation of the text “PEA” followed by three single numbers, with each number ranging from 0 through 9. The curly brackets mean it must be exactly 6 characters long.

Valid values for example 6:

- PEA002
- PEA356

Invalid values for example 6:

- PEA0001
- PEA-005
- PEA-05
- PEA-0512
- PEA-2

**Example 7:**

The Data Type is defined as follows:

**String**  
**{0,50}**

The absence of square brackets means there are no restrictions to the characters in this string. The curly brackets mean it must be a minimum of 0 characters long (i.e., can be blank/null) and a maximum of 50 characters long.

Valid values for example 7:

- 588.3-593.3 MHz + 628.3-633.3 MHz
- Albuquerque-Santa Fe, NM

Invalid values for example 7:

- Greenville-Spartanburg, SC-Asheville, NC-Anderson, SC
- This is an invalid string which is longer than 50 characters including spaces.