

# Federal Communications Commission Office of Engineering and Technology Laboratory Division

# APPLICATION PROGRAMMING INTERFACE (API) FOR OET EQUIPMENT AUTHORIZATION SYSTEM

# 1. OVERVIEW

This publication describes the functions supported by the Application Programming Interfaces (APIs) for the OET Equipment Authorization System (EAS). The API currently has four method calls: getFCCIDList, getWhitespaceAuthorizations, getCBSDAuthorizations, and getAFCAuthorizations. The following sections describe the details of the functions supported and the input and output fields. The getFCCIDList call takes a full or partial FCC ID as a parameter and returns any matching approved equipment authorizations on file with the OET Laboratory. A call to getWhitespaceAuthorizations, getCBSDAuthorizations, or getAFCAuthorizations takes a starting and ending date range as parameters. It returns the FCC IDs for the approved equipment class(s) for equipment either for Whitespace, CBSD, or AFC, respectively, within that date range provided in the call.

# 2. DESCRIPTIONS OF THE SERVICES

**getFCCIDList:** API allows users to enter a grantee code or the initial portion of an FCC ID and obtain a list of all granted FCC IDs that are an exact or partial match. The minimum search criterion that must be entered is a three or five-character grantee code. The return results include a list of FCC IDs that match the search parameters entered, the grant date and application purpose for each FCC ID, and the grantee name and address.

getWhitespaceAuthorizations: API allows users to obtain a list of all white space equipment authorizations subject to Certification that have been approved over the specified date range. The date is entered in the format MM-DD-YYYY. A start and end date are both required. The results returned identify the FCC ID, Equipment Class, Status, Status Date, and Application Purpose. This includes equipment classes for White Space devices (Fixed, Equipment Class WGF; Personal/Portable (P/P) Mode II, Equipment Class WG2; Mobile, Equipment class WMO; Narrowband White Space, Equipment Class WIT) authorized under CFR 47 Part 15 Subpart H and Knowledge Data Base (KDB¹) 416721

getCBSDAuthorizations: API allows users to obtain a list of all Citizens Broadband Radio Service Device equipment authorizations subject to Certification that have been approved over the specified date range. The date is entered in the format MM-DD-YYYY. A start and end date are both required. The return results include the Application Purpose, Equipment Class, FCC ID, Grantee Name, Status, Status Date, Grant Notes, Description, Emission Designator, Frequency Max, Frequency Min, and Power Output. The results returned include all equipment authorizations under the equipment classes CBD-Citizens Band Category A and B Devices, and CBE-Citizens Band End User devices authorized under CFR 47 Part 96 H and Knowledge Data Base (KDB) 940660

**getAFCAuthorizations:** API allows users to obtain a list of all standard access points and fixed client devices that have been certified over the specified date range. The date is entered in the format MM-

<sup>1</sup> KDB Publications can be obtained at <a href="http://www.fcc.gov/labhelp">http://www.fcc.gov/labhelp</a> using the KDB Publication Number Search field.

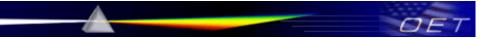
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DD-YYYY. A start and end date are both required. The return results include the Application Purpose, Equipment Class, FCC ID, Grantee Name, Status, Status Date, Grant Notes, Description, Frequency Max, Frequency Min, and Power Output. The return results include all equipment authorizations under the equipment classes 6SD for a Standard Power Access Point and 6FC for Fixed Client devices authorized under CFR 47 Part 15 Subpart E and Knowledge Data Base (KDB) 987594.

# 3. SUMMARY OF RESULTS PARAMETERS RETURNED

<b>Returned Result</b>	Description		
Field			
Application Purpose	The application purpose is a description required on each application		
	submitted that indicates if the application is for a new product or a change to		
	an already existing product. The description can be one of the following:		
	Original Equipment, Class II Permissive Change, Change in Identification, or		
	Class III Permissive Change.		
Description	Free Form field for the product description includes additional information		
1	about the product that was entered on Form 731 by granting		
	Telecommunication Certification Body (TCB).		
Emission Designator	This is typically a 7-character alpha numeric classification that describes the		
	nature of the type of signal being transmitted and specifies the necessary		
	bandwidth. See Sections 2.201 and 2.202 of the FCC rules for more detail.		
Equipment Class	The equipment class is a three character identifier assigned by the FCC to		
	group similar types of equipment.		
FCCID	The FCC ID uniquely identifies the equipment authorization. It is made up of		
	a three or five-character alpha-numeric grantee code that is assigned by the		
	FCC, followed by the product code that is one to fourteen alpha-numeric		
A. C. C.	characters assigned by the grantee and may include the "-"(dash or hyphen).		
	Blank spaces are not allowed.		
FreqMax	The FreqMax field returns the highest operating frequency in MHz.		
FreqMin	The FreqMin field returns the lowest operating frequency in MHz.		
Grantee Address	The getFCCID method call returns multiple parameters related to the Grantee		
Address	address. The grantee is the party responsible for compliance of the device.		
State	Information returned is their address of record in the EAS. State is only		
City	returned if the grantee is located in the US.		
Zip Code			
Country			
Grant Date	The date the device authorized in the FCC Database.		
Grantee	The grantee result field returns the grantee company name. The grantee is the		
	party responsible for compliance of the device. Information returned is their		
	company name of record in the EAS.		
Notes	The notes field returns grant note information. Grant notes are two-character		
	standard text statements on equipment authorization grants that are commonly		
	used that identify conditions of approval. A full list is available at:		
	https://apps.fcc.gov/oetcf/eas/reports/GrantNotesList.cfm		
Power Output	The power output is the amount of power of radio frequency (RF) energy that		
	a transmitter produces at its output in watts. Unless specifically noted by a		
	grant note, the power is measured as conducted power. If the grant note EP is		



	specified, the measured power is EIRP.			
Status	The status is a two-character alphabetic identifier that indicates the status o			
	FCC ID. This search currently returns results for authorized devices. The			
	status codes will be one of the following:			
	GI - indicates that an original Grant has been issued,			
	IP - indicates that a Permissive Change grant has been issued,			
	IM - indicates that a Modification of a grant has been issued.			
Status Date	The status date is the date the application status was last updated in			
	MM/DD/YYYY format.			





# 4. WEB APPLICATION DESCRIPTION LANGUAGE (WADL)

Endpoint - https://apps.fcc.gov/OETLabServices/application.wadl

#### **WADL Content**

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<application xmlns="http://research.sun.com/wadl/2006/10">
        <doc xmlns:jersey="http://jersey.dev.java.net/" jersey:generatedBy="Jersey: 1.4 09/11/2010</pre>
10:30 PM"/>
        <resources base="https://appsat.fcc.gov:443/OETLabServices/">
                <resource path="/getWhitespaceAuthorizations">
                       <method name="GET" id="getWhiteSpaceAuthorizations">
                               <reguest>
                                       <param xmlns:xs="http://www.w3.org/2001/XMLSchema"</pre>
type="xs:string" style="query" name="beginDate"/>
                                       <param xmlns:xs="http://www.w3.org/2001/XMLSchema"</pre>
type="xs:string" style="query" name="endDate"/>
                               </request>
                               <response>
                                       <representation mediaType="application/xml"/>
                                       <representation mediaType="application/json"/>
                               </response>
                       </method>
                </resource>
                <resource path="/getFCCIDList">
                       <method name="GET" id="getFCCIDList">
                               <request>
                                       <param xmlns:xs="http://www.w3.org/2001/XMLSchema"</pre>
type="xs:string" style="query" name="fccId"/>
                               </request>
                               <response>
                                       <representation mediaType="application/xml"/>
                                       <representation mediaType="application/json"/>
                               </response>
                       </method>
               </resource>
                <resource path="/getCBSDAuthorizations">
                       <method name="GET" id="getWhiteSpaceAuthorizations">
                               <request>
                                       <param xmlns:xs="http://www.w3.org/2001/XMLSchema"</pre>
type="xs:string" style="query" name="beginDate"/>
                                       <param xmlns:xs="http://www.w3.org/2001/XMLSchema"</pre>
type="xs:string" style="query" name="endDate"/>
                               </request>
                               <response>
                                       <representation mediaType="application/xml"/>
                                       <representation mediaType="application/json"/>
                               </response>
                       </method>
               </resource>
        </resources>
</application>
```



# 5. METHOD CALLS

# 5.1 getFCCIDList

Search for approved equipment authorizations on file with the OET Laboratory matching a specified FCC ID.

# api call

https://apps.fcc.gov/OETLabServices/getFCCIDList?fccId=<parameter1>

# example call

https://apps.fcc.gov/OETLabServices/getFCCIDList?fccId=OPS10

#### parameters

- The full grantee code followed by a full or partial product code.
- FCCID The full or partial FCC ID that uniquely identifies an equipment authorization (e.g. "OPS"). The FCC ID is made up of a three or five character alpha-numeric grantee code and a product code that can be one to fourteen characters and can be alpha-numeric and include the "- " (dash or hyphen). Blank spaces are not allowed.

#### response

# **JSON**

```
[
    "address": "7435 Oakland Mills Road",
    "state": "MD",
    "country": "United States",
    "fccid": "OPS10",
    "applicationPurpose": "Original Equipment",
    "grantDate": "08/01/2017",
    "grantee": "FCC Laboratory Test Grantee Company",
    "city": "Columbia",
    "zipCode": "21044"
    }
]
```



# **XML**

# result fields

- Grantee address (address, city, country, state, zip code)
- Grantee name
- Grant date
- FCCID
- Application Purpose

# error response

204 (NO CONTENT): If the query is successful, but no results are returned, this code is returned along with the message "The search was successful, but no results were found matching the specified criteria."

400 (BAD REQUEST): This code, along with a specific error message is returned if the URL is not correctly entered (e.g. the FCCID parameter was not included on the URL).

500 (INTERNAL SERVER ERROR): If there is any exception on the server side, it is identified and the http status code is returned. The status description contains the detailed reason for the failure.

# 5.2 getWhitespaceAuthorizations

Get information on approved white space equipment authorizations within a given grant date range.

# api call

https://apps.fcc.gov/OETLabServices/getWhitespaceAuthorizations?beginDate=<parameter1>&endDate=<parameter2>

# example call



 $\underline{https://apps.fcc.gov/OETLabServices/getWhitespaceAuthorizations?beginDate=02-06-2015\&endDate=02-06-2015$ 

# <u>parameters</u>

- The beginning grant date range in mm-dd-yyyy format.
- The ending grant date range in mm-dd-yyyy format.

#### response

# **JSON**

# **XML**

# result fields

- FCCID
- Application Purpose
- Equipment Class
- Status
- Status Date

# error response

204 (NO CONTENT): If the query is successful, but no results are returned, this code is returned along with the message "The search was successful, but no results were found matching the specified criteria."



400 (BAD REQUEST): This code, along with a specific error message is returned if the URL is not correctly entered (e.g. the beginning and ending dates were not included or not formatted properly on the URL).

500 (INTERNAL SERVER ERROR): If there is any exception on the server side, it is identified and the http status code is returned. The status description contains the detailed reason for the failure.

# 5.3 getCBSDAuthorizations

Get information on approved Citizens Broadband Radio Service Devices within a given grant date range.

# api call

https://apps.fcc.gov/OETLabServices/getCBSDAuthorizations?beginDate=<parameter1>&endDate=<parameter2>

# example call

 $\underline{https://apps.fcc.gov/OETLabServices/getCBSDAuthorizations?beginDate=08-01-2017\&endDat$ 

# parameters

- The beginning grant date range in mm-dd-yyyy format.
- The ending grant date range in mm-dd-yyyy format.

# response

# **JSON**

```
"status": "GI",
"fccid": "OPS10",
"granteeName": "FCC Laboratory Test Grantee Company",
"statusDate": "08/01/2017",
"equipmentClass": "CBD",
"applicationPurpose": "Original Equipment",
"lSpecs": [
     "description": "FCC example grant",
     "emissionDesignator": "15M0F9W",
     "powerOutput": 0.989,
     "freqMin": 3550,
     "freqMax": 3700
"lNotes": [
     "grantNote": "Output power is EIRP",
     "grantNoteId": "EP"
                                                             953436 D01 OET Laboratory Services API v03
                                               8
```



# **XML**

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<cBSDAuthorizationVOes>
  <cbsdAuthorizationVO>
    <applicationPurpose>Original Equipment</applicationPurpose>
    <equipmentClass>CBD</equipmentClass>
    <FCCId>OPS10</FCCId>
    <granteeName>FCC Laboratory Test Grantee Company</granteeName>
    <status>GI</status>
    <statusDate>08/01/2017</statusDate>
    <lNotes>
      <notes>
        <grantNote>Output power is EIRP
        <grantNoteId>EP</grantNoteId>
      </notes>
    </l>
    <lSpecs>
      <specs>
        <description>FCC example grant</description>
        <emissionDesignator>15M0F9W</emissionDesignator>
        <freqMax>3700.00000000</freqMax>
        <freqMin>3550.00000000</freqMin>
        <powerOutput>0.9890000/powerOutput>
      </specs>
    </lSpecs>
  </cbsdAuthorizationVO>
</cBSDAuthorizationVOes>
```

# result fields

- Application Purpose
- Equipment Class
- FCCID
- Grantee Name
- Status
- Status Date
- Notes
- Description
- FreqMax
- FreqMin
- Power Output

# error response

204 (NO CONTENT): If the query is successful, but no results are returned, this code is returned along with the message "The search was successful, but no results were found matching the specified criteria."

400 (BAD REQUEST): This code, along with a specific error message is returned if the URL is not correctly entered (e.g. the beginning and ending dates were not included or not formatted properly on the URL).



500 (INTERNAL SERVER ERROR): If there is any exception on the server side, it is identified and the http status code is returned. The status description contains the detailed reason for the failure.

# 5.4 getAFCAuthorizations AFC API for Equipment Classes 6SD and 6FC<sup>2</sup>

The EAS/AFC API is a URL GET<sup>3</sup> call requires two dates <parameter1> and <parameter2>. EAS will return multiple records (XML or JSON format) based on EAS's final action date in the API's < statusDate> field. The date range is between 0:00 of (midnight) for <parameter1> to 24:59.999 for <parameter2>. Each record is unique from any other within the date range call. Each record has a core set of fields that makes the record unique within the date range call, an array of technical specifications associated with the core fields and an array of Notes associated with technical specifications.

# api call

https://apps.fcc.gov/OETLabServices/getAFCAuthorizations?beginDate= <parameter1>&endDate=<parameter2>

# example call

https://apps.fcc.gov/OETLabServices/getAFCAuthorizations?beginDate= 07-01-2023&endDate=08-01-2023

# parameters

• The beginning grant date range in the format mm-dd-yyyy.

• The ending grant date range in the format mm-dd-yyyy.

<sup>&</sup>lt;sup>2</sup> Currently only two equipment classes returned in the API response: 6SD (Standard Access Point) and 6FC (Fixed client).

<sup>&</sup>lt;sup>3</sup> Any internet browser can initiate access to the "call"/API. The default return is XML https://apps.fcc.gov/OETLabServices/getAFCAuthorizations?beginDate=cparameter1>&endDate=cparameter2>

A JSON return can be tested using a Linux curl command such as *curl-o'testJson.txt'--header'Accept:* application/json'--header'Content-Type: application/json'

<sup>&#</sup>x27;https://apps.fcc.gov/OETLabServices/getAFCAuthorizations?beginDate=<parameter1>&endDate=<parameter 2>'



# **Result Structure:**

A record consist of:

	Co	ore Fields table, unique	record	
Field	Type	~ Size	Data	
description	string	~64	Free form	
status	String	2	GI, IP,IM	
fccid	string	'4-19	Various	
granteeName	string	~128	Various	
statusDate	date	10	mm/dd/yyyy	
equipmentClass	string	3	6SD, 6FC	
applicationPurpose	string	28	Original Equipment, Change in Identification, Class II Permissive Change, Class III Permissive Change.	
ISpec	array	An array as a child to the core that can consist of one or more sets of technical specification. Each set consist of the following fields illustrated in the ISpec table below.		
		ISpec table fields		
Field	Type	~ Size	Data	
specs	array	<pre><specs>  only used in XML response. JSON, objects nest arrays within '[' and ']') See examples below.</specs></pre>		
powerOutput	Number*	1,8	Watts	
freqMin	Number*	4,8	MHz	
freqMax	Number*	4,8	MHz	
<inotes></inotes>	array	an array as a child to ISpec that consist of one or more sets of Notes. Each set consist of the following fields illustrated in the INotes table below.		

<sup>\* &</sup>quot;size", "decimal": The total number of digits is specified in "size" parameter. The number of digits after the decimal point is specified in the "decimal" parameter. ex. powerOutput 3.56000000 watts; freqMaz 6415.00000000 Mhz

INotes table						
Field	Type	~ Size	Data			
<notes></notes>	array	<notes> </notes> only used in XML response. JSON, objects				
		nest arrays within '[' and ']') See examples below.				
grantNote	string	1024	Canned string generated by grantNoteId			
	String	1024	Code used			
grantNoteId	string	2	Code			

# error response

• 204 (NO CONTENT): If the query is successful, but no results are returned, this code is returned along with the message "The search was successful, but no results were found matching the specified criteria."



- 400 (BAD REQUEST): This code, along with a specific error message is returned if the URL is not correctly entered (e.g. the beginning and ending dates were not included or not formatted properly on the URL).
- 500 (INTERNAL SERVER ERROR): If there is any exception on the server side, it is identified and the http status code is returned. The status description contains the detailed reason for the failure.

# XML and JSON Example

The following examples for JSON and XML demonstrate a response for one FCC ID: OPS-1<sup>4</sup> with three core records. They are colored coded to illustrate the different application records under one FCC ID. Record one is for equipment class 6FC as an Original Equipment grant, status GI with a status date 07/31/2023 and colored red. Record two is for equipment class 6SD as an Original Equipment grant, status GI with a status date 07/31/2023 colored blue. Record three is class II permissive change grant for equipment class 6SD with a status IP with a status date 07/31/2023 and colored green.

The examples represent a device that is authorized under multiple technical requirements. Return results are organized by FCC IDs by the FCC database structure; under one FCC ID, a series of records can exist called applications. Each application demonstrates compliance with different technical requirements as defined by the regulations. These separate applications are organized under individual equipment classes; for this example, FCC ID OPS-1 has two applications under the equipment classes 6SD for a Standard Power Access Point and one application under equipment class 6FC for a Fixed Client device. Also, individual applications can be filed under the same FCC ID for Original Equipment, Class II Permissive Change, or Class III Permissive Change as applicable. A getAFCAuthorizations call response typically consists of multiple core records; many will have the same FCC ID, as illustrated in the colored example below. This example is for a product that can be used as a standard access point (equipment class 6SD) or a fixed client device (equipment class 6FC) and has a class II permissive change application for the standard access point (6SD).

# JSON example

<sup>&</sup>lt;sup>4</sup> The example represents a device that is a example record and not a marketed device.



```
"lNotes":[
     "grantNote": "Output is EIRP. The antenna(s) used for this transmitter must be
            fixed-mounted on outdoor permanent structures. RF exposure
            compliance is addressed at the time of licensing, as required by the
            responsible FCC Bureau(s), including antenna co-location requirements
            of §1.1307(b) (3).",
     "grantNoteId":"EI"
     "grantNote": "Output power is Effective Isotropic Radiated Power (EIRP)",
    "grantNoteId":"EP"
     "grantNote": "This Multiple Input Multiple Output (MIMO) device was
                   evaluated for multiple transmitted signals as
                   indicated in the filing.",
     "grantNoteId":"MO"
"powerOutput":4.0000000,
"freqMin":5935.00000000,
"freqMax":6415.00000000
"lNotes":[
    "grantNote": "Output is EIRP. The antenna(s) used for this transmitter must be
                   fixed-mounted on outdoor permanent structures. RF exposure
                   compliance is addressed at the time of licensing, as required by
                   the responsible FCC Bureau(s), including antenna co-location
                   requirements of §1.1307(b) (3).",
     "grantNoteId":"EI"
     "grantNote": "Output power is Effective Isotropic Radiated Power (EIRP)",
    "grantNoteId": "EP"
     "grantNote": "This Multiple Input Multiple Output (MIMO) device was
                   evaluated for multiple transmitted signals as indicated in the
                   filing.",
     "grantNoteId":"MO"
```



```
"powerOutput":4.0000000,
    "freqMin":6535.00000000,
    "freqMax":6855.00000000
"description": "Test Application for 6GHz API-ABC std AO",
"status":"GI",
"fccid":"OPS-1",
"granteeName": "FCC Laboratory Test Grantee Company GT 20200718",
"statusDate":"07/31/2023",
"equipmentClass": "6SD",
"applicationPurpose": "Original Equipment",
"ISpecs":[
    "lNotes":[
         "grantNote": "Output power is Effective Isotropic Radiated Power (EIRP)",
         "grantNoteId":"EP"
         "grantNote": "This Multiple Input Multiple Output (MIMO) device was
                       evaluated for multiple transmitted signals as indicated in the
                       filing.",
         "grantNoteId":"MO"
    "powerOutput":4.0000000,
    "freqMin":5935.00000000,
    "freqMax":6415.00000000
    "lNotes":[
         "grantNote": "Output power is Effective Isotropic Radiated Power (EIRP)",
         "grantNoteId":"EP"
         "grantNote": "This Multiple Input Multiple Output (MIMO) device was
                       evaluated for multiple transmitted signals as indicated in the
                       filing.",
         "grantNoteId":"MO"
```



```
"powerOutput":4.0000000,
    "freqMin":6535.00000000,
    "freqMax":6855.00000000
"description": "6GHz API Test Application - ABC std AP",
"status":"IP",
"fccid":"OPS-1",
"granteeName": "FCC Laboratory Test Grantee Company GT 20200718",
"statusDate":"07/31/2023",
"equipmentClass":"6SD",
"applicationPurpose": "Class II Permissive Change",
"ISpecs":[
    "lNotes":[
         "grantNote": "Output power is Effective Isotropic Radiated Power (EIRP)",
         "grantNoteId":"EP"
          "grantNote": "This Multiple Input Multiple Output (MIMO) device was
                        evaluated for multiple transmitted signals as indicated in the
                        filing.",
         "grantNoteId":"MO"
     "powerOutput":4.0000000,
    "freqMin":5935.00000000,
    "freqMax":6415.00000000
    "lNotes":[
         "grantNote": "Output power is Effective Isotropic Radiated Power (EIRP)",
         "grantNoteId":"EP"
         "grantNote": "This Multiple Input Multiple Output (MIMO) device was
                        evaluated for multiple transmitted signals as indicated in the
                       filing.",
```



```
"grantNoteId":"MO"

}

],

"powerOutput":4.0000000,

"freqMin":6535.00000000,

"freqMax":6855.00000000

}

]

}
```

# **XML Example**

```
<aFCAuthorizationVOes>
    <afcAuthorizationVO>
           <applicationPurpose>Original Equipment</applicationPurpose>
           <description>6GHz API Test application ABC Fixed Client/description>
           <equipmentClass>6FC</equipmentClass>
           <FCCId>OPS-1</FCCId>
           <granteeName>FCC Laboratory Test Grantee Company GT 20200718</granteeName>
           <status>GI</status>
           <statusDate>07/31/2023</statusDate>
           <lSpecs>
                   <specs>
                          <freqMax>6415.00000000</freqMax>
                          <freqMin>5935.00000000</freqMin>
                          <powerOutput>4.0000000/powerOutput>
                          <lNotes>
                                  <notes>
                                         <grantNote>
                                                 Output is EIRP. The antenna(s) used for this
                                                 transmitter must be fixed-mounted on
                                                 outdoor permanent structures. RF exposure
                                                 compliance is addressed at the time of
                                                 licensing, as required by the responsible FCC
                                                 Bureau(s), including antenna co-location
                                                 requirements of §1.1307(b) (3).
                                         </grantNote>
                                         <grantNoteId>EI/grantNoteId>
                                  </notes>
                                  <notes>
                                         <grantNote>
                                                 Output power is Effective Isotropic Radiated
                                                 Power (EIRP)
                                         </grantNote>
                                         <grantNoteId>EP</grantNoteId>
```



```
</notes>
                              <notes>
                                      <grantNote>
                                             This Multiple Input Multiple Output (MIMO)
                                             device was evaluated for multiple transmitted
                                             signals as indicated in the filing.
                                      </grantNote>
                                      <grantNoteId>MO</grantNoteId>
                              </notes>
                      </l>
               </specs>
               <specs>
                      <freqMax>6855.00000000</freqMax>
                      <freqMin>6535.00000000</freqMin>
                      <powerOutput>4.0000000/powerOutput>
                      <lNotes>
                              <notes>
                                      <grantNote>
                                             Output is EIRP. The antenna(s) used for this
                                             transmitter must be fixed-mounted on outdoor
                                             permanent structures. RF exposure compliance
                                             is addressed at the time of licensing, as
                                             required by the responsible FCC Bureau(s),
                                             including antenna co-location requirements of
                                             §1.1307(b) (3).
                                      </grantNote>
                                      <grantNoteId>EI/grantNoteId>
                              </notes>
                              <notes>
                                      <grantNote>
                                             Output power is Effective Isotropic Radiated
                                             Power (EIRP)
                                      </grantNote>
                                      <grantNoteId>EP</grantNoteId>
                              </notes>
                              <notes>
                                      <grantNote>
                                             This Multiple Input Multiple Output (MIMO)
                                             device was evaluated for multiple transmitted
                                             signals as indicated in the filing.
                                      </grantNote>
                                      <grantNoteId>MO</grantNoteId>
                              </notes>
                      </specs>
       </lSpecs>
</afcAuthorizationVO>
<afcAuthorizationVO>
```



```
<applicationPurpose>Original Equipment</applicationPurpose>
<description>Test Application for 6GHz API-ABC std AO</description>
<equipmentClass>6SD</equipmentClass>
<FCCId>OPS-1</FCCId>
<granteeName>FCC Laboratory Test Grantee Company GT 20200718/granteeName>
<status>GI</status>
<statusDate>07/31/2023</statusDate>
<lSpecs>
       <specs>
               <freqMax>6415.00000000</freqMax>
              <freqMin>5935.00000000</freqMin>
               <powerOutput>4.0000000/powerOutput>
               <lNotes>
                      <notes>
                              <grantNote>
                                     Output power is Effective Isotropic Radiated
                                     Power (EIRP)
                              </grantNote>
                              <grantNoteId>EP</grantNoteId>
                      </notes>
                      <notes>
                              <grantNote>
                                     This Multiple Input Multiple Output (MIMO)
                                     device was evaluated for multiple
                                     transmitted signals as indicated in the filing.
                              </grantNote>
                              <grantNoteId>MO</grantNoteId>
                      </notes>
               </l>/INotes>
       </specs>
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# **Change Notice**

**08/13/2018:** 953436 D01 OET Laboratory Services API v02 replaces 953436 D01 OET Laboratory Services API v01. Changes to the document include the following: Added information on method call for Citizens Broadband Radio Service Devices. Added table for summary of results parameters returned Updated response examples.

10/23/2023: 953436 D01 OET Laboratory Services API v03 replaces 953436 D01 OET Laboratory Services API v02. Changes to the document include the following: Added information on method call getAFCAuthorizations for 6SD Standard Power Access Points and 6FC for Fixed Client devices authorized under CFR 47 Part 15 Subpart E. Added links to KDB publication numbers and other minor non substantial text cleanup.